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The Form of the Preludes to Bach's Unaccompanied Cello Suites

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**THE FORM OF THE PRELUDES TO BACH'S
UNACCOMPANIED CELLO SUITES**

A Thesis Presented

by

DANIEL E. PRINDLE

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF MUSIC

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Master of Music in Music Theory

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DEDICATION

To Michelle and Rhys.

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First and foremost, I would like to acknowledge the generous sacrifice made by my family. Their patience and support has made this project possible. I would like to thank my parents for their continuing support and encouragement from my first cello lesson to the present day. I would also like to thank the members of my committee, Gary Karpinski, Brent Auerbach, and Miriam Whaples for their time and many insights.

A special thank you to all of my music teachers, past and present, particularly Randy Gordon, who introduced me to the Bach Suites so many years ago.

ABSTRACT

THE FORM OF THE PRELUDES TO BACH'S

UNACCOMPANIED CELLO SUITES

MAY 2011

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This thesis proposes a methodology for understanding the form of a Baroque prelude, particularly the preludes to the Six Suites for Unaccompanied Violoncello written by Johann Sebastian Bach. Four musical dimensions, tonal structure, motive, texture, and the potential implications of a piece's genre, parse the preludes in different ways. As the features of these musical dimensions undergo either an evolution or a dramatic change over the course of each prelude, they each suggest a different form. Points of change in each dimension delineate segments in the music. When aligned, these changes create significant formal junctures and suggest an overall form for the movement. Analysis of the interplay among the musical dimensions clarifies the form of each piece and suggests formal norms for the prelude as a genre.

TABLE OF CONTENTS

	Page
ABSTRACT.....	vi
1: INTRODUCTION.....	1
Form-Defining Musical Dimensions	3
The Editions of the Cello Suites.....	7
Published Analyses of the Cello Suites.....	9
Other Relevant Analytical Approaches.....	12
2: THE PRELUDE TO THE G-MAJOR CELLO SUITE	15
The Pattern-Prelude Genre	15
Tonal Structure	16
The Role of Motive.....	18
Texture	21
The Form of the Movement.....	23
3: THE PRELUDE TO THE D-MINOR CELLO SUITE	26
The Pattern Prelude and the Sarabande.....	26
Tonal Structure	27
Motive	29
Texture	32
The Form of the Movement.....	33

4: THE PRELUDE TO THE C-MAJOR CELLO SUITE	36
Elaborating the Pattern Prelude	36
Tonal Structure	37
Motive	38
Texture	42
Form.....	43
5: THE PRELUDE TO THE E \flat -MAJOR CELLO SUITE	47
The Modified Pattern Prelude	47
Tonal Structure	48
Motive	51
Texture	54
Form.....	55
6: THE PRELUDE TO THE C-MINOR CELLO SUITE.....	59
Scordatura and the Score.....	59
The Lute Suite, BWV 995.....	61
The French-Overture Genre	61
Tonal Structure	63
Motive	65
The Fugue Subject	66
Texture	71
Form.....	72

7: THE PRELUDE TO THE D-MAJOR CELLO SUITE	75
The Five-Stringed Violoncello.....	75
Genre: Elements of the Italian Ritornello and the Pattern Prelude.....	76
Tonal Structure	79
Motive	81
Texture	84
Form.....	85
8: CONCLUSION	87
Comparative Analysis of the Pattern Preludes	87
Conclusion.....	91
APPENDIX.....	93
BIBLIOGRAPHY	103

LIST OF FIGURES

Figure	Page
1.1: mm. 1-4 of the prelude to the First Cello Suite; analysis of the upper voice	6
1.2: mm. 1-4 of the prelude to the First Cello Suite; analysis of the middle voice	6
2.1: Bass Reduction of the prelude to the First Cello Suite	17
2.2: Reduction of mm. 29-31	20
2.3: Form Diagram of the prelude to the First Cello Suite	25
3.1: Bass reduction of the prelude to the Second Cello Suite	28
3.2: Appearances of the Opening Motive	29
3.3: Sequence in mm. 5-10	29
3.4: Evolution of the Opening Motive in mm. 13-17	30
3.5: Four-Note Motive in m. 21, beat 1	30
3.6: Rising Parallel Tenths in mm. 55-59	32
3.7: Form Diagram of the prelude to the Second Cello Suite	35
4.1: Bass Reduction of the prelude to the Third Cello Suite	38
4.2: Motives in m. 1	39

4.3: Motives in mm. 2-4	40
4.4: Middleground Motives in mm. 33-36.....	40
4.5: Ascending Sequence, mm. 72-75	42
4.6a: Form Diagram of the prelude to the Third Cello Suite.....	45
4.6b: Form Diagram of the prelude to the Third Cello Suite, continued	46
5.1: Schachter's (1994) Figure 1a.....	49
5.2: Schachter's (1994) Example 6.....	52
5.3: Typical Figures on the Bass Motive	52
5.4: Bass Motive in mm. 11-27	53
5.5: Bass Variation, mm. 27-33	53
5.6: Bass Motive Preparing the Return to Tonic, mm. 35-39.....	53
5.7: Bass Motive Preparing the Modulation to g minor, mm. 41-45	54
5.8a: Form Diagram of the prelude to the Fourth Cello Suite	57
5.8b: Form Diagram of the prelude to the Fourth Cello Suite, continued	58
6.1: Chords That Rely on Scordatura	60
6.2: Reduction of the prelude, mm. 1-26	65
6.3: Kinney's Example 78 (Kinney 1962, 350).....	67

6.4: Winold's Example a (Winold 2007, 28).....	67
6.5: Lute Suite, BWV 995, mm. 101-107.....	68
6.6: Appearances of the Subject (after Winold 2007)	69
6.7a: Form Diagram of the Prelude to the Fifth Suite	73
6.7b: Form Diagram of the Prelude to the Fifth Suite, continued	74
7.1a: Reduction of Module A, mm. 1-2, arpeggiation of the tonic triad over a tonic pedal.....	77
7.1b: Reduction of Module B, mm. 3-4, a pair of neighboring $\frac{6}{4}$ motions over a tonic pedal.....	77
7.1c: Reduction of Module C, mm. 5-7, confirmation of tonic and modulation up by fifth	77
7.1d: Reduction of Module D, mm. 8-9, rising arpeggiations	77
7.1e: Reduction of Module E, mm. 10-11, static arpeggiations on the local tonic.....	77
7.2: Bass Reduction of the prelude to the Sixth Cello Suite.....	80
7.3: Variations on Modules B and C, mm. 23-32	81
7.4: Descending Scalar Motives, mm. 94 – 99	83
7.5: Form Diagram of the prelude to the Sixth Cello Suite	86
8.1: Comparison of the Pattern Preludes	90

CHAPTER 1

INTRODUCTION

This thesis proposes a methodology for understanding the form of a Baroque prelude, particularly the preludes to the Six Suites for Unaccompanied Violoncello written by Johann Sebastian Bach.¹ I examine each of these preludes as an individual musical entity, inquiring into its form, but I also make comparisons among the preludes. In dividing each piece into formal sections, I take four musical dimensions into account: genre, tonal structure, motive, and texture.² I discuss these musical dimensions as they undergo either an evolution or a dramatic change over the course of each prelude. Points of change delineate segments in music, and an examination of those elements that change

¹ The word *form* in this case refers to the ways that the music is segmented into sections in time.

² The word *dimension* is used by Smith (2005) to mean an “individual strand of the total musical fabric” (7). This is the sense in which I use the word in this thesis. Morris (1987) defines a dimension as “An independent musical attribute consisting of a set of points representing variations in the attribute” (341). This definition is also important as it reflects the significance of change within a dimension, which is crucial to my parsing of form. Lefkowitz and Taavola (2000), following Morris, refer to *dimensions* as musical *parameters*. They then group their *dimensions* into *domains*, though this practice is not adopted elsewhere. Morris (2010) also introduces a hierarchical structure to his musical dimensions, dividing them into structural dimensions, which instill logic in music, and articulative dimensions, made up of the expressive features of music. I consider *domain* and *parameter* to be essentially synonymous with *dimension* from a musical perspective as all three terms are frequently used similarly in the literature on music theory (see, for example, Tenney and Polansky’s use of *dimension* and *parameter* in their seminal 1980 article on musical gestalt perception). Further, I do not group the dimensions or organize them hierarchically, though that type of organization is certainly possible. The word *structure* refers to the tonal structure of a movement as informed by Schenkerian analysis. For an element to be *structural* it must be retained at hierarchical levels beyond the surface of the music. The word *texture* refers to elements of range, chord voicings, composite rhythm, and figuration, but also elements of articulation and instrumental technique, particularly the use of bowing and instrumental resonance in creating polyphony.

during the preludes clarifies their organization in time. I focus especially on Bach's compositional control of the interplay among the musical dimensions and show how points of change in these dimensions align to create significant formal junctures.

Other authors have addressed the issue of interaction among musical dimensions. Rothgeb (1987), in a review of Walter Frisch's book *Brahms and the Principle of Developing Variation*, examines the potential conflicts between a motivic analysis of Brahms and a Schenkerian one. While arguing for the superiority of Schenkerian thought, Rothgeb does admit that "the *interplay* between these two often conflicting planes of organization is an essential feature of Brahms's surfaces" (209) [emphasis added]. Indeed, this interplay among planes of organization is essential to a great deal of music. Smith (2005) addresses the issue. He has called this type of interplay *dimensional counterpoint*: "A movement's form consists of the total structure that emerges through a counterpoint of musical dimensions ... [which] can include virtually any aspect of a piece's sound world" (31). He allows that there could be any number of musical dimensions, but Smith focuses only on the interaction among thematic design, key scheme, and tonal structure. In this thesis, *tonal structure* includes Smith's notion of key scheme as well as Schenkerian aspects of tonal structure, while *motive* refers to Smith's notion of thematic design, but also include shorter motives and their development and variation during the course of a piece.

Swain (2003) has analyzed the interaction of musical dimensions in Bach's ritornellos. He views rhythm at several levels. The first is the rhythm of texture, which he defines as "a record of all the attack points in the music" (191). He notes that Lester has referred to this as "composite rhythm." In either event, this aspect of rhythm is, as

Swain observes, a textural phenomenon and I will view it as such. Swain goes on to discuss the potential interaction among three types of harmonic rhythm: Phenomenal harmonic rhythm (any change of verticality regardless of function), bass pitch rhythm (any change of bass pitch), and root/quality rhythm (any change in root or quality). In this thesis, tonal structure takes each of these dimensions into account. Each chapter provides a figured-bass reduction of the movement. While this reduction does not take rhythm into account, it does account for the motion of the bass (represented by the bass pitches on the staff), as well as motion of verticalities over the bass (represented by the figures). From this information, one can extrapolate the root/quality of each sonority. I discuss the root and quality of chords wherever they play an important functional or structural role in the movement.

Form-Defining Musical Dimensions

Genre

I examine each prelude with regard to a particular Baroque genre. All of the preludes except for the fifth can, to some extent, be analyzed as pattern preludes. As Lester (1999) has shown, the pattern prelude carries with it certain normative formal divisions, which interact with the other dimensions analyzed here. The exception, the Fifth Suite, begins with a prelude and fugue in the French overture style. Other genres are alluded to, as well. The prelude to the Second Suite exhibits some characteristics of a sarabande. The prelude to the Sixth Suite has frequently been called a ritornello movement. Each of these genres suggests a particular form, and each prelude to a greater or lesser extent conforms to the form suggested by its genre.

Tonal Structure

A good deal has been written about the various ways that tonal structure can relate to form.³ However, analyses of this type tend to examine the behavior of tonal structure as it relates to a clearly defined and well-known pre-existing formal construct, such as the *sonata form* or *binary form*. In these cases, the form to some extent exists independently of the piece in question. In contrast, there is no consensus among scholars about what constitutes the form of a prelude. In fact, preludes are understood to have arisen from a tradition of improvisation and do not subscribe to any single traditional form. A prelude may fit the model of a conventional form,⁴ or it may have its own unique and original form. For pieces in the latter category, tonal structure can help to define that form.

Motivic Analysis

Burkhart (1978), in an article on Schenkerian notions of motive, defines a motive as simply “a melodic unit” (146). He notes that, in Schenker’s theory, a motive can be repeated or transformed on the surface of the music, or repeated at deeper structural levels.⁵ In Schenker’s theory, the general term “hidden repetition” can refer to repetition of a motive at the surface or at any other structural level. In contrast, Burkhart refers specifically to repetition across structural levels as “motivic parallelism” (147ff). He goes on to note that rhythmic transformation of a motive is possible at the surface of the

³ See, for example, Schenker 1979 [1935]; Salzer 1962; Rothstein 1989; Cadwallader 1990; Beach 1993; Smith, Peter 1994; Smith, Charles 1996; McKee 1996.

⁴ This is the case in the prelude to the Fifth Suite.

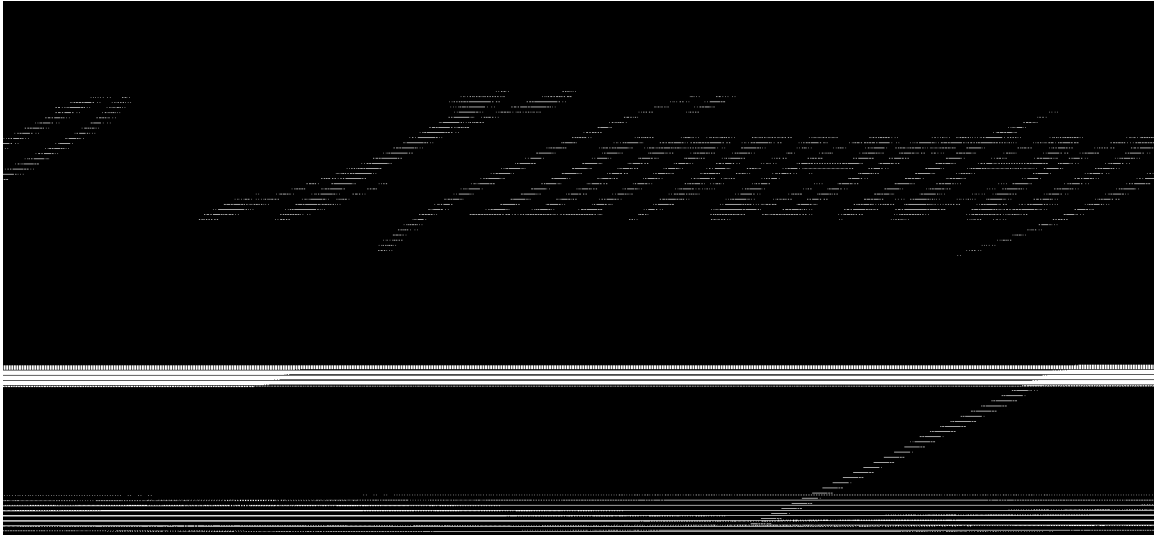
⁵ Note that Burkhart’s observation that motives “*can be repeated*” (146) [emphasis added] indicates that repetition is not a necessary condition for a melodic unit to be considered a motive.

music. Such transformation is not possible at deeper structural levels since Schenker's theory of structural levels is unconcerned with rhythm.

In this thesis, the term "motive" is used in Burkhart's very general sense. It is defined as a melodic unit. My analysis of motive will be concerned with both pitch and rhythm motives on the surface of the music, and also with pitch motives in individual voices within the implied polyphonic structure of each movement. Motivic repetition can help to define form when the repeated or developed melodic ideas cause a section to cohere. Listeners then hear a change of section when new motivic materials appear. However, listeners might also hear a change of section when a thematic motive, perhaps from the opening melodic statement of a movement, recurs after an absence.

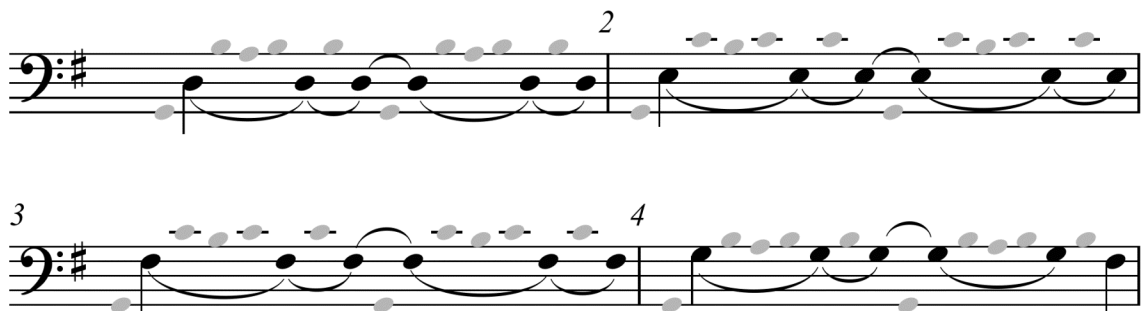
It is important at times to differentiate between motive and texture. The contours created by the large intervals of, for example, the opening four measures of the G-major prelude will be considered a texture, rather than a motive. Just as the opening measures of the C-major prelude of the first book of the Well-Tempered Clavier (WTC) contain an "activated" chord progression, so do the opening measures of the first cello prelude. In both cases, the activation of the chord progression does not create a motive, but a texture. However, the cello prelude in question does contain some interesting pitch-motives within its individual voices. The neighbor note motive that appears first on the third, fourth, and fifth notes of m. 1 is paralleled at a deeper level. The B \sharp that begins this very local neighbor-note figure is itself neighbored at a deeper level by a C \sharp that is initiated in the identical way in m. 2. This C \sharp is prolonged in m. 3 and returns to B \sharp in m. 4. Figure 1.1 shows these local and middleground neighboring motions.

Figure 1.1: mm. 1-4 of the prelude to the First Cello Suite; analysis of the upper voice.



Additionally, there is an ascending scalar motive from dominant to tonic in the middle voice, shown here in Figure 1.2.

Figure 1.2: mm. 1-4 of the prelude to the First Cello Suite; analysis of the middle voice.



These motivic events unify the first four measures of the piece and separate them from the rest of the piece, helping to distinguish them formally from the music that follows.

Furthermore, they return in altered form in the closing measures of the piece and help to distinguish that section as formally separate, as well.⁶

Texture

Texture can in many cases clearly define a change of section. For example, mm. 5-22 of the G-major prelude contain almost exclusively the same combination of local neighbor notes and arpeggiations found in the opening measures mentioned above. From m. 22, the consistent appearance of scalar figures, along with the near disappearance of arpeggiations is a salient indication of a change of section.

Textural considerations can often be combined with articulation. As Kramer (1998) notes, “slurring over motives with similar contour but different intervallic content may indicate some level of sameness in the mind of the composer” (116). A slur can also indicate a separation of a particular group of pitches from the rest of the surrounding material. For example, the long slur in mm. 49-51 in the Anna Magdalena Bach copy of the E \flat -major prelude, combined with the scalar texture of the passage, indicates that these measures are a single idea and could be thought of as a quasi-cadenza (Kramer 1998, 134).

The Editions of the Cello Suites

There is no autograph manuscript in the composer’s hand of any movement of the six suites for solo cello, which has led to a great deal of difficulty in the editing and publication of modern editions of the suites.⁷ Planer (1989) cites three main sources for

⁶ I discuss this instance of motivic development in greater detail in Chapter 2.

⁷ It has also led to a proliferation of editions: Flores (2005) counts over 100.

the suites. The first is in the hand of Anna Magdalena Bach (AMB) and dates from roughly 1730. The second is in the hand of Bach's student Johann Peter Kellner (Kellner), and was originally thought to post-date AMB, but may date from as early as 1726. A third manuscript was owned by Johann Heinrich Westphal (Anonymous C), and was originally thought to be in his hand. It is now known that this manuscript was written by two anonymous copyists and that the second copyist takes over in the middle of the first Bourrée of the Third Suite (Solow 1996). Solow also cites a fourth source (newly-discovered as of his writing in 1996) in an anonymous hand (Anonymous D). However, most twentieth-century editions of the suites did not take this fourth source into account, due to its relatively recent discovery. According to Solow (1996),

[T]he existence of an additional lost copy is likely because the two extant anonymous facsimiles (C and D) [referring here to Westphal and the new 1996 copy] have many grace note ornaments that are not in the Anna Magdalena or the Kellner – and thus probably not in Bach's original. Also, their bowings are quite different from the Anna Magdalena and the Kellner and are, therefore, questionable. Of course, it is always possible that the lost additional copy was a second version by J. S. Bach himself with ornaments and new bowings. The ornaments in Bach's lute version of the Fifth Suite are actually very similar to those in versions C and D.

In a later article, Solow (2002) cited a fifth possible source, which he called Source E. It is “the first published edition of the suites by Janet & Cotelle (1824) and edited by cellist Louis Pierre Norblin (1781-1854).” Solow notes that “E may clarify questionable notes and rhythms and is based on a lost exemplar, perhaps belonging to C.P.E. Bach, the second son of the great composer.”

It is important to note that not one of the five sources discussed here is definitive. Each contains mistakes, inconsistencies, or obvious additions by the copyist. A thorough discussion of these numerous issues is beyond the scope of this thesis and has been well

documented elsewhere.⁸ I will, however, point out pertinent discrepancies as they arise throughout the course of this thesis. In 2000, Bärenreiter released an edition of the cello suites that contains a facsimile copy of each of the five potential sources (Bach 2000). It also contains a “Textband” with information about the sources and a “Scholarly Critical Performing Edition,” an urtext version of the score that contains any discrepancies among the various sources printed directly in the score. This folio is the most complete scholarly edition of the cello suites released to date and is the edition that I will use to perform the analyses in this thesis.⁹

Published Analyses of the Cello Suites

The first comprehensive musicological work on the cello suites is Gordon James Kinney’s 1962 dissertation on the musical literature for unaccompanied violoncello. Kinney devotes over 100 pages to the cello suites, covering issues of performance, history, and form within the individual movements and the suites as a group. Kinney’s approach to dividing the preludes formally is based on two factors: changes in key area and changes in motivic content. Groups of measures within a single key area are seen as

⁸ For example, Kenneway (1980) notes that there are two types of alterations found in the AMB copy of the suites: “(1) the correction of obvious mistakes – wrong notes, omitted notes, etc – which are musically illiterate as they stand, and (2) the alteration of passages or notes which are not illiterate but which, nonetheless there is reason to doubt.” For more information on the subject, see Planer (1989), Solow (1996, 2002, and 2006), and Carrington (2009).

⁹ It should be noted that Bärenreiter also published the suites as part of the *Neue Bach Ausgabe*. That edition, which is also urtext, is quite similar to the 2000 version, and was the authoritative scholarly edition of the suites prior to the release of the 2000 publication. However, it takes into account only the first four sources that I have discussed here (AMB, Kellner, and Anonymous C and D).

sections, and where motivic content changes within a single key area smaller sections are marked off.

Motive in Kinney's analysis is viewed primarily as the contour and intervallic content of complete measures or groups of beats. While Kinney recognizes the polyphony implied by Bach's contours, he does not apply his motivic analyses to individual voices within the polyphonic texture. Winold (2007) takes a similar approach to motive. However, Winold also recognizes that certain motivic constructs can be broken into multiple voices. For example, in his analysis of the opening four measures of the prelude to the first suite, he analyzes the third, fourth, and fifth eighth-notes of each measure as a neighbor-note figure, highlighting their independence as members of the upper voice in the texture. He also provides a harmonic reduction on a second staff that aligns the constituent voices as chords. Conversely, in other sections of this prelude Winold analyzes multiple voices as part of a single motive, as in mm. 32-36. But Bach's use of *ondulé* in this particular section would seem to indicate a reading multiple voices.¹⁰ I will offer a more thorough investigation of motivic structures within individual voices, rather than solely on the surface of the music.

In dividing each piece into sections, Winold, like Kinney, views motion to new key areas as form-defining. However, Winold takes the potential rhetorical functions of

¹⁰ Another term that might be appropriate for this section is "bariolage." Boyden and Walls (2011) describe this technique as "most frequently applied to the special effect in which the same note is played alternately on two strings – one stopped and one open – resulting in the juxtaposition of contrasting tone-colours." Bariolage would apply more exactly to the passage in mm. 31-36 of the G-major prelude. However, throughout this thesis, I will use the more general term *ondulé*. As Walls (2011) notes, *ondulé* "refer[s] to a 'wavy' motion executed by moving the bow back and forth across two or more adjacent strings." I consider both techniques to be the same textural device. Also, each has the effect of generating implied polyphony, which will be crucial to my analysis here.

sections into account more than Kinney. Both authors view the first sectional division in the G-major prelude as occurring in m. 5. However, while Kinney views it as a subdivision of a larger section comprising mm. 1-22 (essentially the first half of the piece), Winold recognizes the strong introductory character of mm. 1-4, and thus analyzes these four measures as an independent introductory section, which is consistent with the view that these measures are an *exordium* figure, a concept discussed by Lester (1999) in regard to the Partitas and Sonatas for Violin.

While Winold and Kinney look closely at the musical details that divide these movements into sections, Mellers (1981) takes a much broader view. His analyses generally divide the movements into a small number of large sections. His approach is concerned primarily with aesthetics and to some extent hermeneutics, exploring the potential meanings of the keys chosen for the various suites and attempting metaphors for describing various passages. For example, Mellers describes the opening 48 measures of the Fourth Suite as a single section, which “swings like a pendulum” (20). In describing the prelude to the Sixth Suite, he argues that

The D major suite begins as a celebration of the visible, audible and tactile world, in the key of trumpets and of resonating open strings... [but] it becomes no less profoundly a religious piece.... With Bach the celebration of Nature's creativity is a manifestation of the divine (26).

The only other author to look exclusively at the preludes to the cello suites is Eric Kutz (2002) in his DMA dissertation. Kutz is the first author to examine in his analyses the notion of certain preludes as representative of Baroque genres. He argues that the second prelude is an improvisation on a sarabande rhythm, notes that the fifth prelude is in the French overture style, and posits that the sixth prelude is a ritornello. These assertions appear elsewhere in the literature only as passing mentions, and while Kutz

does explore the formal implications of a variety of musical factors, he does not thoroughly investigate these genre classifications. For example, he mentions that the sixth prelude is a ritornello, but is not explicit about *how* it is a ritornello. Winold (2007) would later provide an analysis of the fifth prelude as an exemplar of the French overture style, but he does not assert any explicit genre classifications for the other preludes. I take into account all of the potential genre classifications for each prelude, considering them in combination with each other and with each of the other musical dimensions.

Other Relevant Analytical Approaches

The cello suites are in many ways quite similar to Bach's contemporaneously composed Sonatas and Partitas for Unaccompanied Violin. By far the most comprehensive work on the subject is Joel Lester's (1999) book. Lester's analysis of the g-minor adagio in chapter two notes that this opening movement acts as a prelude to the following fuga. He calls the movement a "pattern prelude" and compares it to the C-major prelude from the first book of the Well-Tempered Clavier (WTC), and to other preludes from the same work. Lester also suggests two important compositional principles that are useful in the analysis of the cello suites: "heightened activity" and the use of rhetoric. Kutz (2002) makes note of both of these principles at work in his analysis of the preludes to the cello suites, citing a variety of examples that I will discuss in detail.

Kramer (1998) discusses at length the articulation markings in the various editions of the suites. This investigation, along with Carrington's 2009 book on the trills in the cello suites, is an invaluable tool for the performer. However, Kramer's work on articulation becomes particularly valuable for the analyst when she discusses slurring.

The short slurs in the various manuscript copies are likely to have indicated bowing. However, there are several longer slurs that are not likely to have indicated an intended articulation, but rather an intended phrasing. In these instances, articulations viewed as potential phrase indications can offer a way of viewing a suite at the smallest formal level: the phrase.

In examining the tonal structure of the preludes, it will be important at times to take into account Carl Schachter's 1994 article on the prelude to the Fourth Cello Suite. In this movement, Schachter finds what he calls a "submerged urlinie." The fundamental line in this case appears in a middle voice. The two voices above it at the opening of the movement act as "inner voices" filling out the harmonies indicated by the bass voice and the urlinie, which is "submerged" below these higher voices.

There are five other important considerations that will be crucial to any substantive analysis of the preludes. These elements will not be separately considered for each prelude, but will be considered wherever appropriate throughout the analyses. They include: (1) Lester's (1999) notion of heightened activity, (2) repetition and return of materials, especially in openings and closings of movements, (3) the rhetorical role of passages,¹¹ (4) implied polyphony, and (5) the role of improvisation in preluding and its potential ramifications for the composition of non-improvised preludes.

These many approaches provide a wide variety of perspectives on this music, which is why the notion of interplay of musical dimensions will be crucial in the process

¹¹ Lester (1999) discusses the connection between rhetoric and the Violin Partitas and Sonatas, as well as the music of Bach in general. For more on rhetoric and J.S. Bach, see Butler (1977), Harrison (1990), Kirkendale (1997), and Varwig (2008). Concerning rhetoric and Baroque music, see Bartel (1997) and Blake, et al. (2011). Concerning rhetoric and post-Baroque music, see Bonds (1991).

of analyzing the preludes. In summarizing the form of a particular movement, it will be crucial to take note of the agreement or disagreement among these form-defining elements. This interplay among the musical dimensions is itself form-defining. The coalescence of changes in harmony, texture, motive, and many other elements can create a point of gravity in the compositional fabric that marks a particular moment as distinctly important. It is in this manner that I will bring together all of these potential analytical considerations to create an integrated picture of the form in each of these preludes.

CHAPTER 2

THE PRELUDE TO THE G-MAJOR CELLO SUITE

The Pattern-Prelude Genre

The prelude to the First Cello Suite is a pattern prelude. Joel Lester (1999) developed the concept of the pattern prelude in his book *Bach's Works for Solo Violin*. Lester analyzes both the Adagio from the g-minor Sonata and the Adagio from the C-major Sonata as pattern preludes. The locus classicus for this genre, however, is the C-major prelude from the first book of the WTC. Lester notes that, in the Little Notebook for Wilhelm Friedemann Bach, a version of the C-major prelude appears written as block chords (27). This notational shorthand indicates that 18th-century composers and performers (Bach in particular) in some cases conceptualized these preludes as elaborated chord progressions. The pattern of elaboration in the WTC C-major prelude is consistent and repetitive, while the adagios from the violin works feature far more involved elaboration. As Lester notes, “whether its pattern is complex or simple, the overall coherence of a pattern-prelude depends on its underlying harmonies and voice leading” (27).

The prelude to the First Cello Suite falls somewhere between the simplicity of the WTC prelude and the complexity of the violin Adagios. The cello prelude begins simply with an arpeggiated chord progression that is very much reminiscent of the opening of the WTC. However, after its opening four measures, it becomes progressively more complex, adding a variety of new arpeggiated figures and eventually moving to chromatic figurations involving a variety of scalar and diminutional patterns. According

to Lester, “[A]ll of the pattern-preludes in the first volume of the Well-Tempered are built like the C-major prelude, with an opening and closing progression to set the key, one or more bass scales (like the Rule), and a dominant pedal before the end” (31).¹²

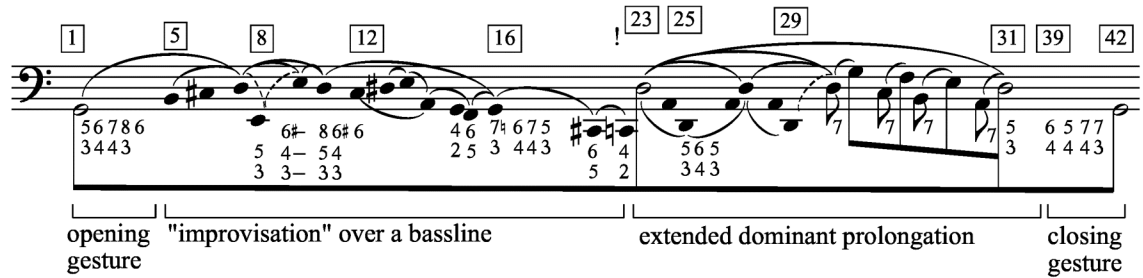
This description is equally apt for the G-major cello prelude. Lester also notes that the pattern preludes in the WTC increase in complexity as the book progresses, reflecting their didactic nature as well as the composer’s growing compositional prowess. The cello suites follow a similar progression of increasing difficulty and complexity, and the later pattern preludes of the suites are likewise more compositionally complex than the G-major.

Tonal Structure

A view of this movement from a tonal perspective shows that it fits Lester’s definition of the pattern prelude. Figure 2.1 provides a bass reduction of the movement. The first four measures offer a typical key-establishing chord progression over a tonic pedal. The following section (up to m. 22) proceeds to depart from the tonic and to a large extent fulfills Lester’s requirement of being “like the Rule.” Measure 22 begins a dominant prolongation that continues until the final measure of the piece. The final four measures of the piece (from m. 39 to the end) provide a closing cadential gesture.

¹² The “Rule” that Lester refers to is Champion’s (1716 [1976]) *Règle de l’Octave*.

Figure 2.1: Bass Reduction of the prelude to the First Cello Suite.



Tonally, the first half of the prelude (m. 1-22) contains a loose parallel structure. After the opening gesture, the music from m. 5 to m. 10 strongly tonicizes the dominant. The following measures (up to m. 16) are of a more episodic character and weakly tonicize the supertonic and submediant. In m. 16, the structural bass returns to tonic and the music begins to modulate back to G major. This section is strikingly similar to the opening gesture. The harmony in m. 16 has become V/IV, rather than the tonic harmony. However, the tonic pedal is in place throughout these four bars, the subdominant harmony in m. 17 matches that of m. 2, and the music in m. 18 is identical to m. 3. The following measure (m. 19) contains a convincing tonic arrival and is a very brief recapitulation of m. 1 (Kutz 2002, 68). The remainder of the first half of this movement moves toward the dominant. The music in mm. 1-10, which features a tonic pedal followed by motion to the dominant, is paralleled by the music in mm. 16-22, which contains the same elements.

Important to note in this section is the tonicization of the dominant, which begins in m. 22 with a fascinating juxtaposition of $C\flat$ and $C\sharp$ within a single arpeggiation. On the downbeat, the open C string, a cello's lowest note, sounds as the lowest pitch of a V_2^4 chord in the tonic key of G major. The upper pitch of this chord, D4, is approached with

a C[♯]. This cross-relation not only serves to strengthen the primacy of the dominant in the section and foreshadow the tonicization of that harmony, but also partially deflects the lack of resolution of the C[♭] in the bass, which should resolve down, but can never do so on a cello. The pitch C[♭] continues to appear for the remainder of the piece in various registers, but seldom proceeds to B[♭]. When it does proceed to B[♭], it does so only as part of a figural pattern, rather than as part of a resolution from dominant to tonic harmonies. The C[♭] is not resolved as a chord tone until the final cadence. It is presented during the penultimate measure of the piece, to be resolved only on the last chord.

The arrival on the tonic pitch in m. 39 is ambiguous in a very interesting way. The moment of the downbeat is heard as a much-desired arrival on tonic after the extended dominant prolongation, and it serves as the apex of the rising line that began in m. 37. However, the third sixteenth-note of the first beat of m. 39 is a D[♭] in the bass voice, revealing that the dominant pedal is still present. The high G[♭] is heard retrospectively not as a point of arrival, but as a fourth above the bass. The dominant in the bass insists that we must wait until the very last measure of the piece for resolution when the bass finally proceeds down a fifth to the tonic.

The Role of Motive

In this prelude, Bach seamlessly introduces new motivic materials. On a local level, the opening four measures of the movement contain only the arpeggiations and neighbor figures discussed in Chapter One. The lone exception is the final pitch of m. 4, F[♯]. This pitch is the first passing tone of the piece, moving from the tonic, G[♭], to the submediant, E[♭], within the middle voice of the texture. An exact transposition of this figure (D[♭], C[♯], B[♭]) appears on the final three sixteenth notes of m. 5, compressing the

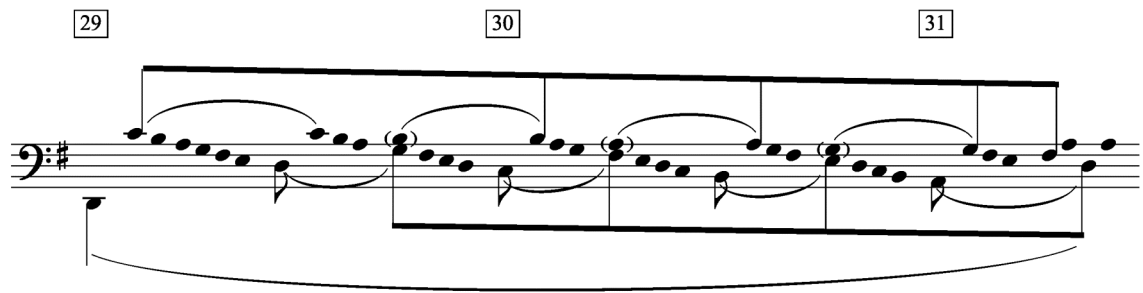
motive in time, but also facilitating the introduction of the first chromatic pitch of the movement. Additionally, beginning with the F[♯] passing note in m. 4, the ascent from D3 to G3 in the middle voice that began in m. 1 has now turned around and proceeded from G3 back to D3. The motion from D3 to B2 in m. 5 then serves to connect the middle voice to the structural bass.

In mm. 5-10 there is a repeated harmonic progression that is out of phase with a motivic sequence, creating a misalignment of musical dimensions. These six measures comprise a repeated progression of ii – V – I in the key of D major with one chord per bar. In contrast, mm. 5-6 contain similar motivic material to m. 7-8. Measures 9-10 contain new material, breaking the motivic sequence, but completing the repetition of the harmonic progression. The remainder of the first half of the piece, which continues until the fermata at m. 22, consists of elements introduced in the first 10 measures of the movement. These are: the arpeggiation and neighbor-note combinations that made up mm. 1-4, and a variety of scalar passages or passing figures similar to those introduced in mm. 4-10.

After the fermata, a dominant prolongation begins, lasting from m. 22 to m. 38, which can be divided into two sections. The first, from m. 22 to m. 29 features a wide range of figuration, very localized chromaticism, and a melodic-harmonic sequence. This section stands apart from the rest of the movement as the most free and fantasia-like. The dominant prolongation then relies on a sequence from mm. 29-31.¹³

¹³ Winold (2007, 25) offers three potential interpretations of this 3-measure section. He begins by citing Ernst Kurth, who says that a descending melodic line of C, B, A, G, F[♯] is created by the apex of each upward seventh leap. Then he cites “other analysts” who have called this section a series of 7-6 suspensions. Lastly, he offers that it could be considered as a single descending line with a series of register transfers up by a seventh.

Figure 2.2: Reduction of mm. 29-31.



This circle-of-fifths sequence proceeds through one complete diatonic rotation and returns to the dominant in m. 31, which initiates an explicit dominant pedal, as opposed to the composing-out of the dominant harmony that preceded it. This pedal is soon combined with continuous motion in parallel thirds against combined dominant and supertonic pedals. Eventually the dominant yields, leaving the supertonic as the lone pedal tone in mm. 35 and 36. The dominant pedal then returns in m. 37 to accompany a rising chromatic line that will culminate on the tonic to begin the movement's triumphant close at m. 39.

Kutz (2002, 69) has noted the final four measures are an example of Lester's (1999) notion of "heightened intensity." Heightened intensity occurs when a reworked version of earlier material appears in some way more intense than the earlier appearance of the musical idea in question. The final four measures of the prelude represent a heightening of the opening four. These sections in turn form a frame for the movement. In the closing gesture, the uppermost voice arrives on $\hat{8}$, proceeds to $\hat{7}$ and returns to $\hat{8}$, recalling the neighbor-note motion that occurred at multiple structural levels in the

Ultimately, Winold opts to analyze this section as a series of parallel sixths, presumably a reduction of the 7-6 suspensions. This is similar in many ways to my interpretation, but the 7-3 suspensions require a change of bass.

opening.¹⁴ The structural upper voice at the opening, which includes $\hat{3}$ and its upper neighbor, $\hat{4}$, is now found in the middle of the texture, and the single neighbor note, $\hat{4}$, is transformed into the double neighbor figure, $\hat{2}$ and $\hat{4}$. There are several other intensifying effects: wider ambitus, higher range, a dominant rather than a tonic pedal, and more frequent string changes. Nonetheless, this section recalls the opening four measures of the piece and is thus separated from the material that preceded it.

Texture

The most prevalent textural feature of this movement is Bach's use of *ondulé*. The instances of this technique in the movement are particularly characteristic, as they often exploit the open strings of the cello, allowing the separate pitches of the arpeggiated chords to ring together, explicitly creating the multi-voiced textures that are implied throughout the suites. Lester (1999) has observed that Bach often begins his compositions, especially collections of works for a particular solo instrument, with a gesture that typifies that instrument.

Just as Bach opened his Well-Tempered Clavier by arpeggiating a major triad from middle C and opened his cycle of Inventions with a scale rising from that same middle C [...] Bach ingeniously opened his solo-violin cycle with the simplest and most characteristic chord a violin can produce (3).

The opening chord of the G-major Cello Suite is equally characteristic on a cello, as is the *ondulé* technique that so effectively exploits the resonance of the large body of the instrument.

Changes of texture in this movement often correspond with changes in other dimensions. First, the significant textural shift at m. 22 strongly reinforces one of the major formal dividers in the piece. Kutz (2000) has observed that, prior to the fermata,

¹⁴ I am indebted to Brent Auerbach for this observation.

the music is “arpeggiated, largely diatonic, symmetrical” (61). After m. 22, scales are the predominant texture, and chromaticism is used for “coloristic effect” (61). Second, the return in m. 15 to the opening texture of the movement strongly reinforces this section’s tonal recall of the opening. Another particularly salient example of dimensional alignment is the conspicuous absence of *ondulé* from the fermata in m. 22 to the end of the cycle of fifths in m. 31. This section is a prolongation and tonicization of the dominant, while the music from m. 31 to the end features a more explicit pedaling of the dominant pitch made possible by the return of the *ondulé*. During the first half of the piece, this alternation from string to string is never absent for more than a measure at a time, and from m. 31 to the end it is never absent at any time. However, from m. 31 to the closing gesture at m. 39 nearly all the *ondulé* occurs between only two strings.

Winold (2007, 20) discusses the use of “musical space,” which essentially describes Bach's exploitation of the range of the cello. He notes that the music directly preceding the fermata constitutes the widest range of the cello used up to that point in the movement. This increase in ambitus presages the first of two climactic moments in the piece, the fermata. From the C2 on the downbeat of m. 22 to the D4 of the fermata, the music opens to a range of a major sixteenth. The second climactic moment in the movement is the four-measure closing gesture discussed above. Winold observes that the final chord of the movement utilizes the second widest range in the prelude, a perfect fifteenth. It is also interesting to note that the ambitus is narrowed significantly in m. 31. Bach compresses the musical space to a perfect fifth beginning on beat 2, creating a wedge that expands outward to m. 34, reaching a width of an octave. The musical space begins to become compressed again from m. 34 through m. 37, where the chromatic

ascent begins, after which the musical space opens much more quickly and drastically as it approaches the closing figure.

The Form of the Movement

Changes in multiple musical dimensions align to create three significant formal junctures in this movement. As a result, the piece has four major sections: the opening gesture in mm. 1-4, a series of chord progressions over a bass-line from m. 5 to m. 22, the dominant prolongation that begins in m. 22, and the closing gesture that occupies the final four measures of the piece. In the midst of each of these four sections, changes in each musical dimension tend not to align, a feature that accentuates the importance of the more significant junctures that occur between the four main sections. Figure 2.5 shows how the musical dimensions interact to create a clear formal picture of the movement.

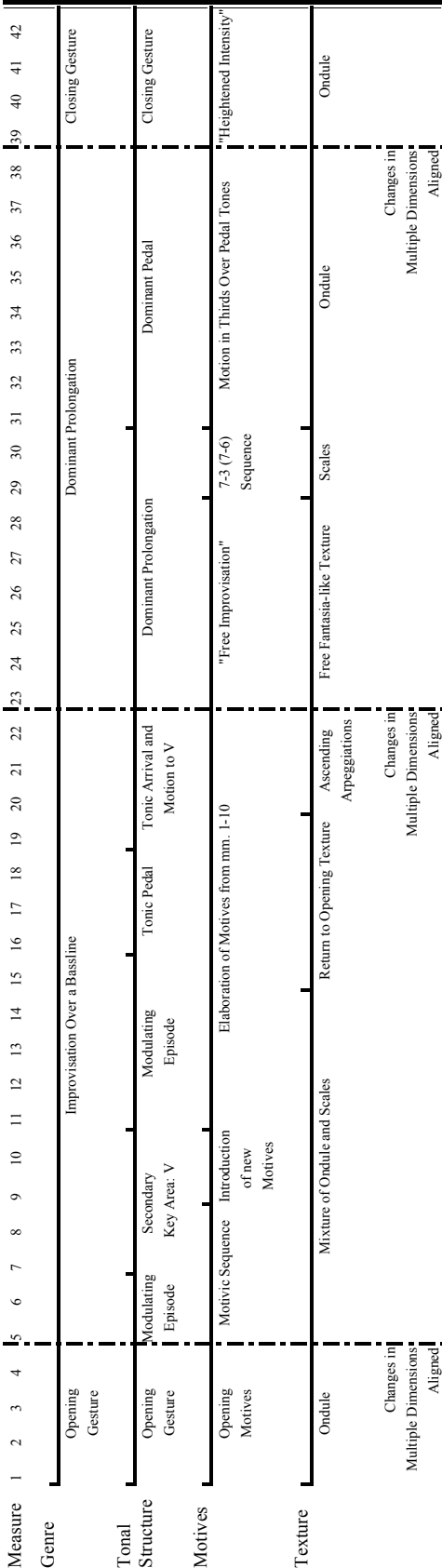
These four sections roughly correspond to those outlined by Winold (2007). Kramer (1998), on the other hand, combines the first two sections in her general statement about the preludes to the cello suites:

The first four preludes can be divided into three parts: 1) the first and longest section establishes the key and main figuration; 2) the second section elaborates some form of dominant harmony; and 3) the third section re-establishes the tonic harmony and refers to the movement's opening figuration. The second or middle section begins roughly halfway through the prelude and often includes some type of "improvisatory" figuration over a dominant pedal (131).

In this instance, Kramer would not make the distinction between the key-establishing gesture at the opening of the movement (mm. 1-4) and the remainder of the first half. However, the separation of the opening gesture from the rest of the movement is crucial, as it serves an important function in establishing the key, and is demonstrated to be an important part of Bach's conception of this style of prelude. Nonetheless, Kramer's statement is an important one, because it observes the significant similarities among the

first four preludes. I will discuss such similarities in greater detail in the following chapters.

Figure 2.3: Form Diagram of the prelude to the First Cello Suite



CHAPTER 3

THE PRELUDE TO THE D-MINOR CELLO SUITE

The Pattern Prelude and the Sarabande

Kutz (2002) has remarked that “in a lesson in 1995, Joel Krosnick mentioned to me that the prelude to the Second Suite was really an improvisation over a sarabande rhythm” (70). Winold (2007, 21) has also noted the elements of the sarabande genre present in this prelude. He cites the longer duration of tones on beat 2, the slow triple meter, and the prevalence of dotted rhythms as elements of the dance’s style. However, as Winold observes, the piece is not in binary form, so it would be inappropriate to analyze it as a sarabande per se. Little (2010) has observed that “J. S. Bach composed more sarabandes than any other dance type. His 39 surviving sarabandes are all virtuoso pieces in suites for a solo instrument (keyboard, cello, flute, violin or lute) except for the one in the Orchestral Suite in B minor, BWV 1067.” The 39 pieces to which she refers are all explicitly labeled as sarabandes. However, she continues, “Sarabandes sometimes occur, though untitled, in other works, such as in the chorale prelude *An Wasserflüssen Babylon* (BWV 653), the aria to the *Goldberg Variations* (BWV 988) and the final chorus of the *St. Matthew Passion* (BWV 244).” To Little’s two categories, *named sarabandes* and *unnamed sarabandes*, I would add a third: movements based on the sarabande rhythm.

This particular movement unfolds within the rhythmic framework of the dance, but with the loose formal framework of the pattern prelude. The movement begins with a key-establishing gesture, proceeds to an elaborated harmonization of a bassline, and makes use of a strong dominant pedal. The d-minor cello prelude can be compared to the

g-minor violin Adagio, containing a prelude bass, but with a rhapsodic melodic line.¹⁵

“The melody is heard not so much as a series of fixed gestures, but rather as a continuously unfolding rhapsodic improvisation over a supporting bass” (Lester 1999, 38).

Tonal Structure

The opening harmonic progression of this movement is remarkably dark. Bach opts not to establish the key with a dominant chord, but rather with a vii°7. Further, he proceeds directly from the tonic to this leading-tone diminished chord, bypassing any pre-dominant harmony in favor of introducing the striking dissonance of the diminished seventh in the second measure. This chord is re-voiced in m. 3, creating a double-neighbor figure in the bass that surrounds the tonic and finally returns to it in m. 4. The next measure initiates a sequence that will modulate to the relative major in m. 13.¹⁶ The music then leads up a third again, cadencing in the key of a-minor at m. 24. The bass immediately departs from the pitch A, but when it arrives there again in m. 30, the accompanying harmony has changed to the dominant of the home key of d-minor.

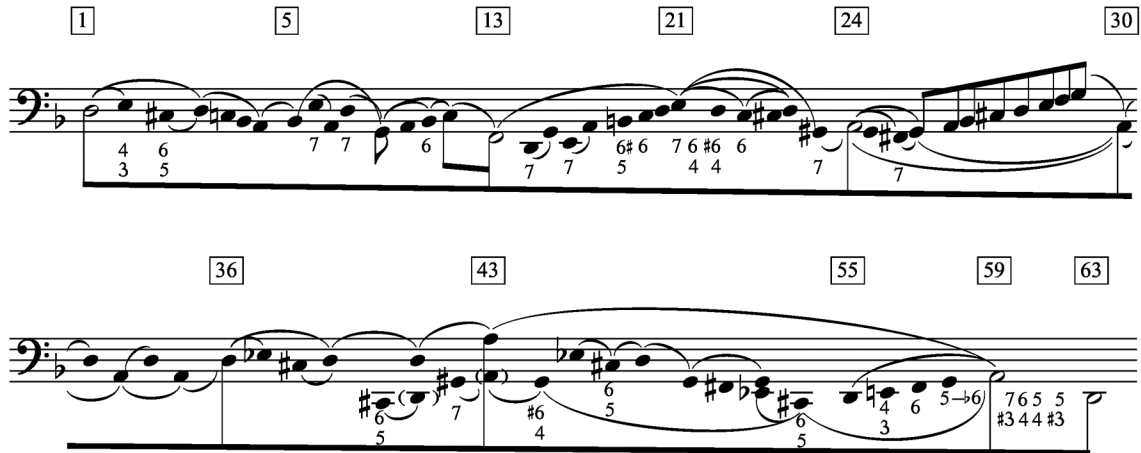
Interestingly, this dominant arrival resolves to the tonic in m. 36, long before the close of the piece. The music remains in the tonic key for several measures before landing on the dominant in m. 43. Equally interesting is the music from mm. 49-53, which acts as a kind of parenthetical insertion of pre-dominant harmony, specifically the

¹⁵ Lester (1999, 31) also compares the g-minor Adagio to the e-minor prelude from the Well-Tempered Clavier, which also contains a prelude bass that is coupled with an elaborate melody line.

¹⁶ The arrival in the key of F-major, along with accompanying motion to F in the structural bass, is an example of Schenker’s notion of the “third divider” (see Schenker 1979 [1935], page 113, figure 130).

Neapolitan. This Neapolitan is not unique within the movement. It appeared first in m. 37, and returns in m. 58, just before the dominant pedal that initiates the final cadence of the movement. Figure 3.1 offers a bass reduction of the movement.

Figure 3.1: Bass reduction of the prelude to the Second Cello Suite.



Winold (2007, 22) has noted that the final cadence is the only perfect authentic cadence (PAC) of the movement. All other cadences are relatively weak in comparison. In fact, cadential root motion by fifth is rare in this prelude. The cadential motion established at the outset that prefers the leading-tone diminished chord to the dominant sets a precedent that is followed throughout the movement. This half-step cadential motion darkens the harmonic tone, but also strengthens the final cadence significantly by withholding the resolution from dominant to tonic until the very end of the movement.

Motive

The opening measure of the d-minor prelude is a declaration of the main motivic material of the movement. There are only four versions of this measure that feature the same rhythmic content. They are given in Figure 3.2.

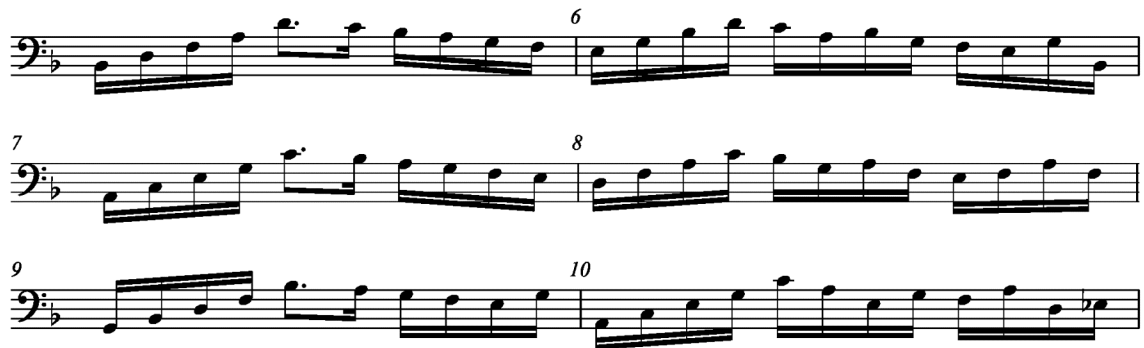
Figure 3.2: Appearances of the Opening Motive.



The return of the opening motive in m. 13 is aligned with the tonal structure. It arrives along with the key of the relative major.

The modulating sequence that brings the music from d minor to F major is an example of Bach's use of heightening levels of activity (see Figure 3.3). The sequence features a two-measure-long model, stated in mm. 5 and 6. The second measure in each sequence is varied, with beat 3 of m. 8 representing new material and beats 2 and 3 of m. 10 representing new material.

Figure 3.3: Sequence in mm. 5-10.



After its return in m. 13 in the relative major, this motive is subjected to development.

Figure 3.4 shows the evolution of the motive as it appears in mm. 13, 15, and 17.

Figure 3.4: Evolution of the Opening Motive in mm. 13-17.



Measure 13 is a diatonic transposition of the opening motive from m. 1. When it returns in m. 15, now on g minor, the first beat of the measure is activated through the insertion of the descending scalar motion generally reserved for the end of the measure, delaying the ascending arpeggio by half a beat. Measure 17 begins with the opening figure from m. 15 transposed up by a whole step.

A highly local motive emerges as important on the first beat of m. 21, out of alignment with the tonal structure of the movement. The essential characteristics of this motive (shown in Figure 3.5) are as follows: it is one beat long and contains four sixteenth notes; the first note leaps to the second (from one chord tone to another); the second, third, and fourth notes all move stepwise in the same direction; notes 2 and 4 are chord tones and note 3 is a passing tone between them.

Figure 3.5: Four-Note Motive in m. 21, beat 1.

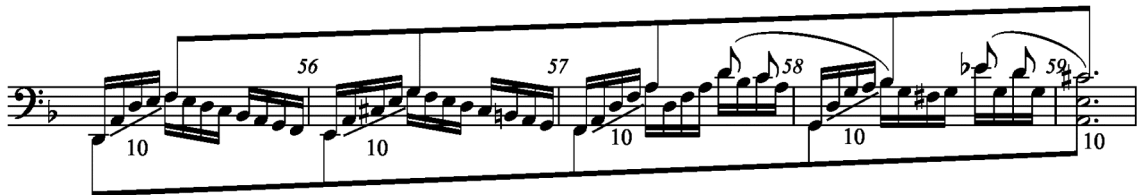


This motive saturates the texture throughout the middle of the movement, appearing in all but two of the measures between m. 21 and m. 35. The initial leap and the scalar passage that follow appear in the upward or downward direction, creating a variety of contours that can be used interchangeably throughout the section. All of the music prior to m. 21 consists of motives and sequences of one or two measures in length. This shift to the frequent, almost constant use of a motive of a single beat in length throws the movement forward at an accelerated pace. The motion builds toward m. 36, a cadence on the tonic. This is the first appearance of the tonic since the opening of the movement and it provides the first moment of harmonic stability since the arrival on the mediant in m. 13. Measure 37 introduces the Neapolitan and begins a sequential procedure that leads to the strikingly dissonant variation on the opening rhythm motive that appears in mm. 40 and 42 (see Figure 3.2), after which the dominant prolongation begins.

The next significant motivic event is the rising sequence in mm. 55-59, shown in Figure 3.6. At the surface, it would appear that these four measures are composed of two separate sequences: one in mm. 55-56, and another in mm. 57-58. In fact, they are subsumed under a rising progression of parallel tenths between the bass and upper voice. This progression concludes in m. 59 with a strong arrival on the dominant pedal that prepares the final cadence of the movement. Viewed in this light, the entire four-measure passage is part of a single rising sequential progression that is developed as it proceeds, pushing steadily upward toward the dominant and denying the brief feeling of resolution achieved by the tonic chord in m. 55. Ultimately, the resolution must wait until the final

measure of the movement. As we shall see in Chapter 8, a final ascent during or directly before the closing gesture is a salient feature of each of the first three preludes.

Figure 3.6: Rising Parallel Tenths in mm. 55-59.



Texture

The primary texture for the movement is that of rhapsodic melodic figuration. There is no clear division between scalar and arpeggiated textures. Rather, they are combined throughout the movement, giving the prelude a feeling of continuous melody. There is one full stop caused by the fermata chord at the downbeat of m. 48. While the fermata strongly marks the dominant of d minor, it does not mark the beginning of the dominant prolongation, which began at m. 43. Rather, it serves to slow the motion of the movement, allowing for the insertion of the parenthetical Neapolitan digression.

There is only one other significant departure from the rhapsodic texture of the movement. Beginning at m. 59, chords appear in the score. These are written as block chords in each of the five original sources. However, in manuscript E (the first published edition), this passage is marked “Arpeggio.” Additionally, the Anonymous D manuscript shows each chord marked with a double hash-mark, indicating the possibility of using the *ondulé* texture that is idiomatic to the cello, but is relatively absent from the d-minor prelude.

The Form of the Movement

Changes in multiple musical dimensions align to create three significant formal junctures in this movement (see Figure 3.8). The first four measures establish the key. This is followed by chordal elaborations over a prelude bass from mm. 5-42. The music then arrives at a dominant prolongation in m. 43, which is sustained (albeit with some significant deviations as noted above) until the close of the piece.¹⁷

A detailed view of the first half of the prelude (from m. 1 to m. 40) reveals that the tonal and motivic dimensions work together to create a less significant formal division at m. 13. The modulation to the relative major coincides with the return of the motivic material from m. 1 to create a strong sense of arrival. The remainder of the first half is characterized by misalignments of dimensions that continue until the dominant prolongation begins in m. 40.

The dominant prolongation is strongly signaled by the repetition of the opening motive in m. 40. Explicit reiteration of the dominant continues until the fermata chord in m. 48. Were this chord to be replaced by a root-position dominant chord, the movement could very easily end in m. 49. However, the G \sharp in the bass makes it clear that the movement is far from over. I have discussed the parenthetical nature of the Neapolitan section from m. 49 to m. 53 above, but this digression is not a new section. Rather, the rising sequence of parallel tenths that begins in m. 55 signals the true closing section of the piece. Kinney (1962) has called this final section a Coda. However, the weak strength of the cadence from m. 54 to m. 55 reduces its sense of finality, and the goal-

¹⁷ These sections correspond to some of the formal sections outlined by Winold (2007), but Winold adds more divisions to his analysis, resulting in a total of ten separate sections.

directed motion in mm. 55-58 pushes forward toward the true dominant at m. 59. Here, as in the G-major prelude, the motion of the movement is continuous until its end.

CHAPTER 4

THE PRELUDE TO THE C-MAJOR CELLO SUITE

Elaborating the Pattern Prelude

The C-major prelude is another pattern prelude. The key is established by proceeding from tonic to dominant twice over the course of a six-measure phrase. The complete first measure combined with the first beat of m. 2 forms a gesture that is distinct within the context of the opening.¹⁸ Following this introductory figure, the music between m. 2, beat 2 and m. 4, beat 1 is replicated up an octave in m. 4, beat 2 to m. 6, beat 1. Finally, a descending scale derived from the first measure ends the opening, establishing the material from m. 1 as not only a frame for the movement as a whole, but also a frame for the opening.

The closing gesture of this movement leads to a strong cadence in m. 82, and the movement is completed by a coda. The dominant prolongation ends even earlier, at m. 71, which features a return to tonic on the downbeat of that measure. The rising sequential material of mm. 71-75, which is derived from mm. 2 and 4, initiates the closing section, after which the bass proceeds back downward toward the cadence at m. 82.

Despite its elaborate framing materials, the prelude still has all of the required elements of the pattern-prelude genre: the opening serves as a key-establishing gesture, and there is an extended dominant pedal beginning at m. 45 which is even more explicit

¹⁸ Kinney (1962) has commented that “the majestic two-measure motive with which the movement begins serves also to conclude it, so that these two statements of it constitute something in the nature of a diminutive prelude and postlude between which the movement proper is formed” (371).

than the dominant prolongations found in the first two preludes. Further, the music between the opening and the pedal can be viewed as an example of Lester's (1999) "improvisation over a supporting bass" (38).

Tonal Structure

The opening of this prelude is followed immediately by a sequence whose goal is a secondary key area, the dominant (G major) in m. 13.¹⁹ In addition to this move to G major, the first half of the piece features motion only to the submediant key area.²⁰ The close of the piece features several tonicizations of the subdominant, but no true modulation to that key. Figure 4.1 is a bass reduction of the prelude.

Changes in harmonic rhythm also play a significant role in the movement. The harmonic rhythm prior to m. 20 is very regular, with a new chord nearly every bar. With the arrival of a minor in m. 27, the harmonic rhythm slows to one chord per two measures. It accelerates again in m. 33, pushing toward a V to I cadence in m. 36-37 (see Figure 4.6). The tonic arrival is in keeping with the pattern established by the first two preludes, where Bach arrives strongly on the tonic before proceeding to the dominant pedal. After which, faster harmonic rhythm returns combined with an unvarying harmonic sequence that pushes toward the dominant pedal in m. 45.

The dominant-prolongation portion of this prelude is organized in two parts. The prolongation is characterized by a series of three-note descending scalar motives bearing the figures $\frac{5}{3} \frac{4}{2} \frac{6}{6}$ (see Figure 4.1, mm. 62-71). The strong tonicization of the dominant

¹⁹ The opening measures of this piece offer an example of Schenker's (1979 [1935]) notion of "coupling" (52ff). The key-establishing gesture, which also establishes a head-tone of $\hat{3}$, is replicated in a higher octave.

²⁰ Winold (2007) has observed that this movement is harmonically relatively simple because of the small number of modulations present in it.

that takes place during the pedal reduces the inclination for the dominant to resolve immediately to tonic. Bach releases the pedal and revisits the pre-dominant function to reestablish C major as the tonic. He does this, but does not return explicitly to the dominant before cadencing in C at m. 71. He saves the strongest cadence for mm. 81-82, closing the movement proper and initiating the start of the coda.

The coda of this movement, which begins with the arrival of the structural tonic chord in m. 81, features what Schenker (1979 [1935]) calls “boundary play” (103ff). The upper voice moves from the tonic through a lowered $\hat{7}$ to $\hat{6}$, and then proceeds back to the tonic via a diatonic $\hat{7}$.

Figure 4.1: Bass Reduction of the prelude to the Third Cello Suite.

The figure displays a bass reduction of the prelude to the Third Cello Suite, consisting of two staves of music. The first staff covers measures 7 to 37, and the second staff covers measures 45 to 82. Fingerings are indicated by numbers 1-5 and 7-9. Structural labels are placed below the staves to identify key sections.

Staff 1 (Measures 7-37):

- Measures 7-13: Labeled "opening gesture".
- Measures 13-37: Labeled "improvisation" over a bassline.

Staff 2 (Measures 45-82):

- Measures 45-71: Labeled "extended dominant prolongation".
- Measures 71-82: Labeled "closing gesture".
- Measures 81-82: Labeled "coda".

Motive

Kinney (1962) argues that most of the motivic material in this movement comes from the first measure. The motives are “traceable, more or less deviously, as derivative in some way or other from this basic motive: whatever is scalar comes from the first two

beats, and whatever is disjunct, from the third beat” (371). Similarly, Kutz (2002) has argued:

The first two beats of measure one consist of a scale, the third beat of an arpeggio. The interplay between these two is used to organize the movement.... In this Prelude, Bach organically moves from scales at the beginning, to arpeggios over the dominant pedal, and back to scales to set up the return near the end (72).

Winold (2007) refers to the entire first measure as a single motive, “a.” I will consider this measure to be composed of the two motives that Kinney and Kutz have alluded to, referring to them as “A” (the descending scalar octave) and “B” (the inverted-arch-contoured arpeggio). Figure 4.2 shows these motives in m. 1.

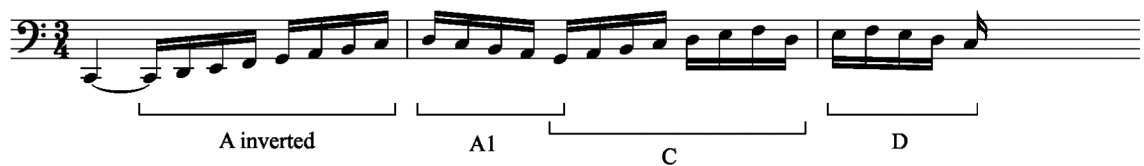
Figure 4.2: Motives in m. 1.



The music in mm. 2-4 is shown in Figure 4.3. The motives contained in these measures are predominantly scalar.²¹ The scalar A motive is developed into two others: an ascending scale (A inverted) and a descending scalar fifth (A1). Following this is motive C, an ascending scalar seventh followed by a downward leap of a third, and motive D, a descending third, embellished by a complete upper neighbor and a descending passing tone.

²¹ Winold (2007) refers to the entire phrase in mm. 2-4 as a single motive, “b”.

Figure 4.3: Motives in mm. 2-4.

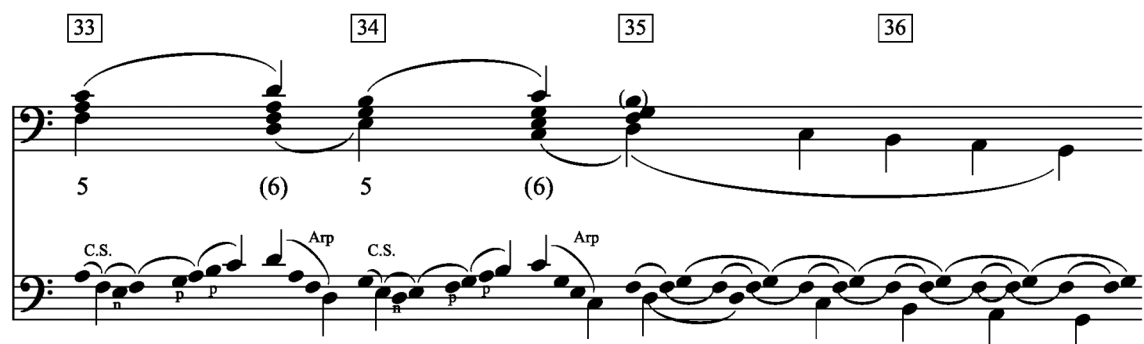


These motivic materials are repeated up an octave in mm. 4-6, achieving the coupling mentioned above. Measure 6, beat 2 closes the gesture with motive A.

Winold (2007, 25) has observed that sequences are abundant in this movement. He notes that melodic sequences are present in 67 of the 88 measures of the piece. The first sequence of the movement, from mm. 7-12, facilitates the modulation to the dominant. Motivic and harmonic materials align in this two-measure pattern. Further alignment occurs at m. 13 as the arrival of the dominant coincides with the return of the inverted-A and A1 motives.

Another sequence appears in mm. 15-18. Episodic material follows, lasting until the arrival of an ascending 5-6 sequence in mm. 33-34 (see Figure 4.4).

Figure 4.4: Middleground Motives in mm. 33-36.



This sequence achieves the harmonic acceleration in these measures mentioned earlier. An appearance of motive A1 in the bass voice in mm. 35-36 aligns with the tonal structure as it signals a return to tonic. This arrival is quickly contradicted by yet another sequence, which begins at m. 37.

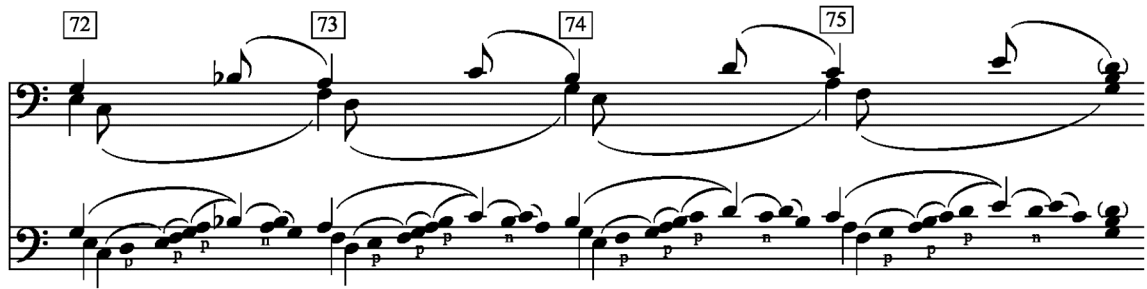
The sequence that extends from m. 37 to m. 44 is populated by versions of motives B and A1. In this section, motive B asserts itself as the most prominent of the entire movement. Arpeggios with this contour are abundant in the prelude owing to the prevalent *ondulé* texture. However, the arch-shaped arpeggio appears frequently independent of the *ondulé*,²² and is virtually ubiquitous from m. 37 all the way to m. 60.

In m. 45, sequential material gives way to a descending line in parallel sixths at the deep middleground level over a dominant pedal. There is a strong arrival on G in m. 61. Following this is a descending bassline with undulating contours that are reminiscent of motive D (see Figure 4.1, mm. 62-70). These contours end at m. 71, corresponding with the arrival of the tonic. Kinney (1962) has referred to this measure as an “inverted reprise” of the opening gesture of the movement.²³ It leads directly to the ascending fifths sequence of m. 72, which is an elaborated version of motive C on the surface. At the middleground level, however, it is an ascending sequence as shown in Figure 4.5.

²² See, for example, mm. 27-36.

²³ Interestingly, m. 78 could be considered an inverted version of Kinney’s inverted reprise.

Figure 4.5: Ascending Sequence, mm. 72-75.



Winold (2007) has associated this progression with fauxbourdon: “A variant of the fauxbourdon progression in bars 72-75 has harmonic progression by second with parallel root-position chords instead of parallel sixth chords” (25). An analysis based on ascending root-position chords is possible here. However, the presence of the sevenths would seem to contradict any possibility of viewing this section as a series of ascending triads, leading us instead to an interpretation like that shown in the top staff in Figure 4.5.

Following this ascent, a series of chords proceeds to a cadence in m. 82. However, prior to this series of chords, there is a dominant chord leading to another iteration of the opening motive of the piece (m. 78). Again this opening motive performs a framing function, dividing the first part of the closing gesture from the second. It then appears for the last time as the final gesture of the piece.

Texture

Kutz (2002, 63) has observed that the pedal in this prelude (mm. 45-61) contains a largely homogeneous texture, while the preceding measures consist of a variety of elements, including scales and arpeggios in various patterns. In fact, the movement could be characterized texturally as a move from variety to consistency and back to variety.

Just as the opening measure contains the two main textural elements of the movement, the scale and the arpeggio, nearly the entire first half of the movement varies its figuration widely between these two elements. At m. 37 a more regular texture appears, but the dominant pedal brings with it the most relentlessly consistent texture of all of the preludes. After the end of the dominant pedal in m. 61 some variety returns, but the relentless string of sixteenth notes in mm. 61-70 still consists largely of arpeggios. At m. 71, the scalar texture of the opening returns, and even greater variety arrives with the chords that begin to appear in m. 77. The alignment of these significant changes in the textural with those in the tonal domains reinforces the dominant pedal/prolongation as a formally significant moment in the pattern-prelude genre.

Form

The form overall of this movement reveals once again the basic elements of the pattern prelude. However, the coda (m. 82-end) is unique to this prelude. The coda is concluded by a recapitulation of the opening measure. So, whereas the movement is closed tonally at m. 82 and the other dimensions affirm the formal juncture created in that measure, the opening and closing measures of the piece serve as small opening and closing gestures set apart from the rest of the formal action in the piece. The prelude-bass section of this movement features a modulation to a secondary key early in the movement. This arrival constitutes a sub-section of the prelude-bass section as the tonal structure coincides with a cessation of harmonic motion and unique motivic materials at m. 13. The next formal subdivision of the prelude bass occurs in m. 37 with the return of the tonic.

The dominant prolongation in mm. 45-70 is subdivided into two sections, beginning with *ondulé*, then moving to more elaborate textures. The cadence to tonic in m. 71 is not particularly strong, but it does initiate the closing section of the piece, as it brings a return to scalar texture and motivic material reminiscent of the opening. A much stronger cadence to tonic occurs in m. 82 and initiates the coda.

Figure 4.6a: Form Diagram of the prelude to the Third Cello Suite

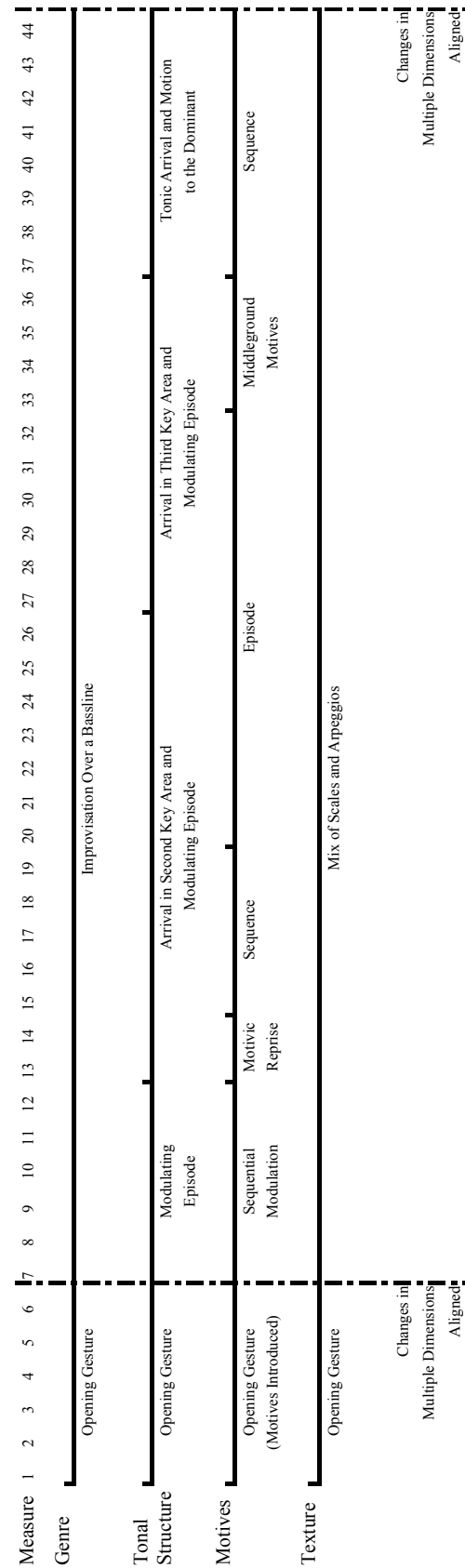
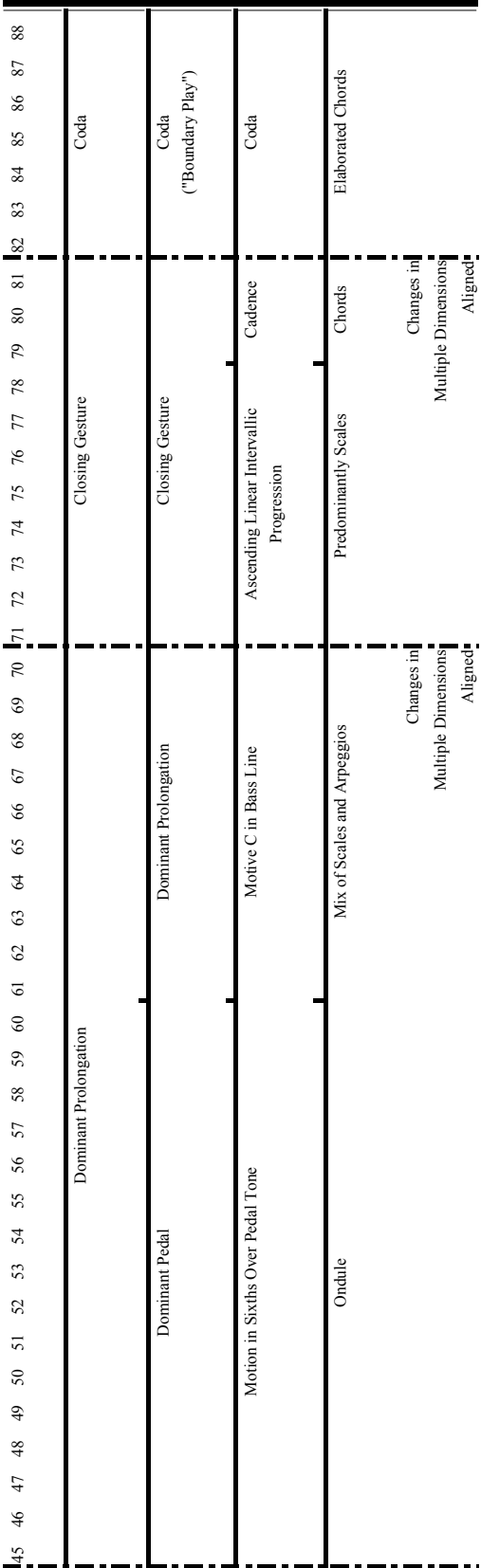


Figure 4.6b: Form Diagram of the prelude to the Third Cello Suite, continued



CHAPTER 5

THE PRELUDE TO THE E \flat -MAJOR CELLO SUITE

The Modified Pattern Prelude

This prelude is composed almost entirely of arpeggios, causing it to appear on the surface to be similar in many ways to the C-major prelude from the first book of the WTC. It looks like an elaborated chord progression. The movement's closing material is a nearly exact repetition of the opening gesture. Whereas the notion of a recapitulation of the opening is alluded to in the C-major prelude, it is made uniquely explicit here. This movement is also unique among the preludes in that this secondary key area of c minor is presented in m. 11, almost immediately after the opening, rather than serving as the arrival point of a modulation.

The “dominant” pedal in this prelude, which arrives in m. 52, is on D \sharp . Locally, the pedal acts as the dominant of g minor, which is the third key area of the piece. In the context of E \flat , which presides over the movement, this pedal is on the leading tone, which is highly unusual. The move to the leading-tone pedal occurs in place of a move to a dominant pedal. This dominant pedal to a secondary key area precedes a prolongation of the primary dominant. Bach modulates to the key of g minor (thereby resolving the pedal) before finally moving to the dominant, B \flat , in m. 70. The dominant prolongation that begins in m. 70 is highly chromaticized. After digressing to the tonic minor and the Neapolitan, the dominant finally leads to the return of the tonic and the recapitulation that appears in m. 82.

Despite these unique harmonic elements, the movement contains the necessary elements of the pattern prelude. From a textural perspective, its consistent arpeggios

bring it closer to the genre than any other prelude in the suites. It contains the requisite opening and closing gestures in the tonic. It also contains a prelude bass and a dominant prolongation. The digression to g minor and accompanying leading-tone pedal will be discussed in detail below as exploitations of keys that are idiomatic to the cello.

Tonal Structure

Schachter (1994) presents a complete Schenkerian analysis of this movement, reproduced here as Figure 5.1. I will refer to portions of that analysis that are pertinent to an understanding of its form. The first formally important element that Schachter tackles is the frame created by the opening and closing gestures. He argues that the D \flat presented in the opening (m. 3) represents a problem in need of a solution. Generally, a composer might juxtapose this with a rise from C to D \sharp to E \flat , creating an instance of boundary play.²⁴ Bach does proceed through D \sharp back to E \flat , but the D \sharp in mm. 7-8 and its subsequent resolution to E \flat in m. 9 are transferred down an octave into an inner voice. “In a brilliant stroke at the end of the piece, however, Bach quotes the opening pedal point for six measures, but he stops the literal repetition with a magnificent improvisatory flourish that raises the D \sharp into its rightful register and resolves it to the high E \flat ” (54).

²⁴ Schachter (1994, 54) notes that “in the chapter on diminution in *Free Composition*, Schenker cites the melodic aspect of this particular idiom, together with other related figures, as an example of ‘boundary play.’ He identifies it by a string of intervallic symbols ($\hat{8}-\flat\hat{7}-\hat{6}-\sharp\hat{7}-\hat{8}$).... The progression is one of several common formulas in which $\hat{6}$ as upper neighbor gravitates to $\hat{5}$ only in the middleground voice leading.”

Figure 5.1: Schachter's (1994) Figure 1a; A Schenker-Graph of the Eb-major Prelude.

Figure 1.

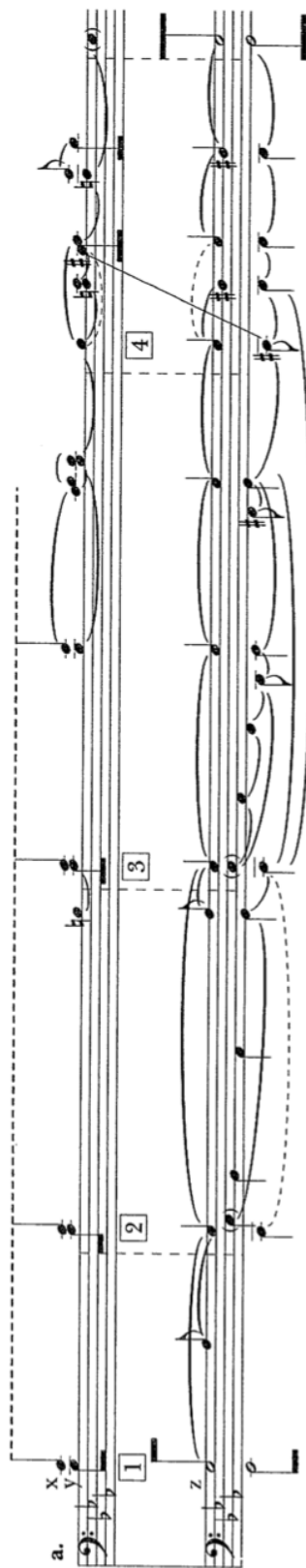
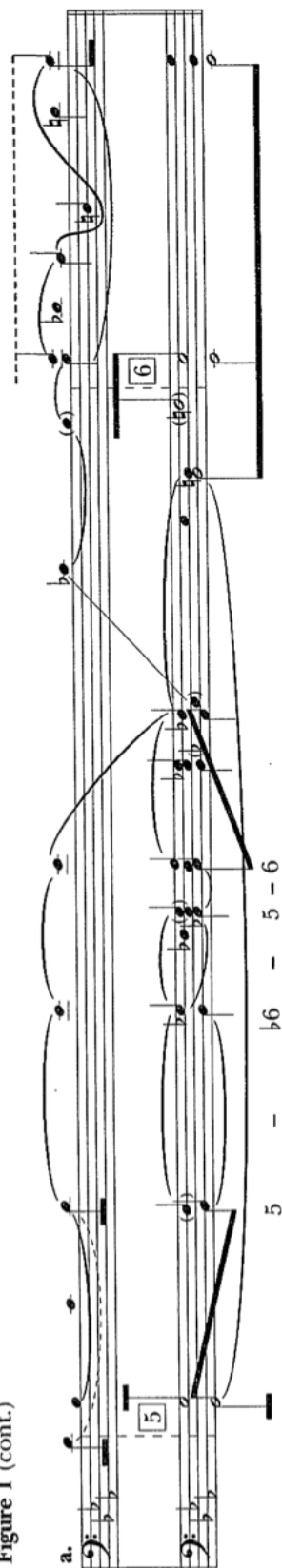


Figure 1 (cont.)



The most harmonically interesting element of the body of this movement is its modulation to mediant key areas. Ko (2000) notes that “the key of E \flat is not a natural key for cello, because the open strings C, G and D, function as its Submediant, Mediant, and Leading tone.” It is probably no coincidence that the key areas to which Bach moves are c minor and g minor, rather than the dominant or subdominant keys of B \flat major and A \flat major. These mediant keys make use of the instrument’s open strings and as a result are more resonant than the tonic key of the prelude or either of its closely related major keys. This movement also lacks an extended dominant pedal on B \flat . It does, however, contain an extended pedal on D. The result is a strong modulation to g minor in m. 62. G minor represents the strongest secondary key area of the movement and acts as a third-divider that divides the diatonic distance from tonic to dominant (Schachter 1994, example 5).

The submediant key area also plays an important role in the movement. Despite the tonicization of B \flat and A \flat in mm. 15 and 19, the first modulation here is to c minor in m. 27. Bach uses sequential procedures immediately after the end of the opening gesture to modulate to this secondary key area. He arrives in c minor in m. 27, and proceeds to tonicize f minor in m. 35 and modulate to g minor in m. 45, managing in short order to touch all of the closely-related minor keys, but none of the major ones. Between these two events is a return to tonic in m. 39, a return that occurs in the first half of every other prelude and is generally followed by some episodic material that serves to move to the dominant. Here, Bach modulates instead to g minor, a key that will be much more strongly confirmed by its dominant pedal. Just as Bach has first introduced c minor as a

harmony and then confirmed it as a key, he introduces g minor, this time as a key, but he will proceed to emphasize it in a much stronger manner in the measures to follow.

The music continues until the downbeat of m. 49, when a fermata on C \sharp breaks the continuity of the eighth-note motion. Were the movement in g minor, this stop on C \sharp would imply V/V and lead logically to a dominant pedal, but the movement is not in g minor, and the fermata is striking as a result. Schachter (1994) argues that this C \sharp is an enharmonic transformation of the problematic D \flat from the opening gesture. If so, this would suggest that the pedal on the leading-tone that follows constitutes an effort to resolve the D \flat that was “left hanging” in the opening gesture. After the arrival on g minor in m. 62, the music proceeds away from that key and reaches a B \flat in m. 70. Some interesting chromatic twists and turns follow. The B \flat , dominant of the home key, proceeds instead to e \flat minor. This tonal digression culminates in an arrival on the Neapolitan harmony on the downbeat of m. 80. Finally, the structural dominant sounds on beat 3 of m. 81. It lasts all of two beats, a far cry from the extended dominant pedals of the previous preludes, before proceeding to the closing gesture in m. 82.

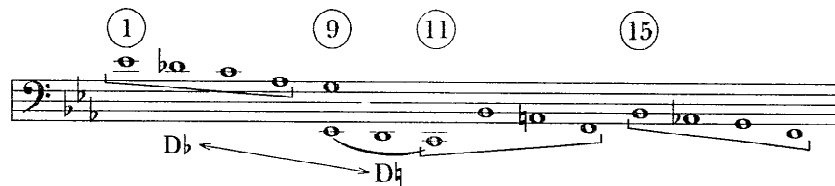
Motive

There is a significant motive in the bass that emerges after the tonic pedal of the opening (see the reproduction of Schachter’s Example 6 in Figure 5.2). Schachter (1994) cites the passing motion in the bass of mm. 9-11 as being drawn from the similar passing motion in the upper voice of mm. 1-5.

The bass's E \flat -D-C is an echo... of the E \flat -D \flat -C that we had just heard in the highest voice The descending sequential passage that begins in m. 11 takes up the contour - a descending triadic contour partially filled in by a passing tone - of the top voice in mm. 1-8 (64).

Figure 5.2: Schachter's (1994) Example 6.

Example 6. Bach, Suite No. 4, Prelude. Parallelisms.



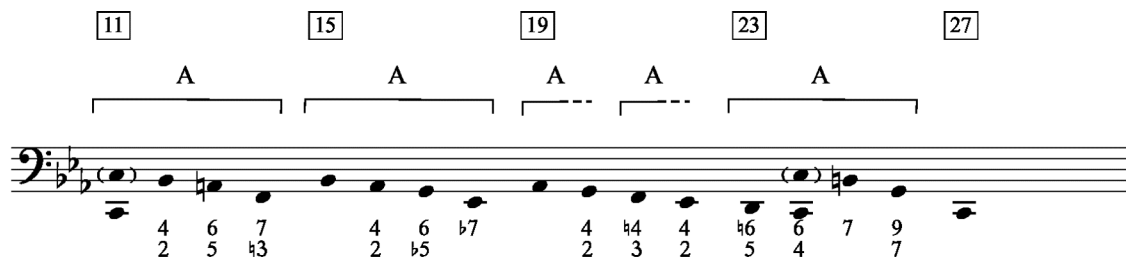
As this is a bass motive, it interacts closely with the dimension of tonal structure. In each bass version of the motive, the first pitch heard is the root of its harmony. As the second pitch appears, the harmony remains, creating a $\frac{4}{2}$ inversion, which passes logically to a $\frac{6}{5}$ chord. The following leap of a third is a consonant skip, changing the final harmony of the motive to a root-position seventh chord (see Figure 5.3).

Figure 5.3: Typical Figures on the Bass Motive.



Throughout the movement, this motive signals the arrival of significant changes in key area. Measures 19-27 contain an extended version of this gesture. The motive is initiated in mm. 19-20, and again in mm. 21-22, but each time only its first two pitches appear. It is then initiated for the last time in m. 23. The motive is completed on this third try, but by passing through a $\frac{6}{4}$ chord over C2, rather than the expected $\frac{4}{2}$ chord that generally occurs on the second pitch of the motive (see Figure 5.4).

Figure 5.4: Bass Motive in mm. 11-27.



A temporally expanded variation of this motive appears in mm. 27-34 (see Figure 5.5).

Figure 5.5: Bass Variation, mm. 27-33.



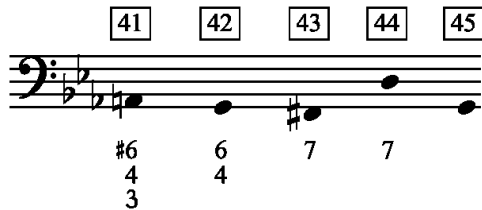
The motive returns in an altered form to facilitate the return to the tonic (see Figure 5.6).

Figure 5.6: Bass Motive Preparing the Return to Tonic, mm. 35-39.



Immediately after the return of $E\flat$ in m. 39, the motive appears again, this time with the new $\frac{6}{4}$ harmonization on the second note (see Figure 5.7). It brings the prelude into the key of g minor, where it remains for an extended period.

Figure 5.7: Bass Motive Preparing the Modulation to g minor, mm. 41-45.



The role of this motive in this movement is unique in that it often serves a signaling function, aligning closely with the tonal structure of the movement.

Texture

The movement juxtaposes two basic textures: the arpeggiated eighth notes that dominate most of the movement and the fantasia- or cadenza-like sixteenth-notes that are interspersed throughout. The movement opens with an arpeggiated texture that remains throughout the first half of the piece, until the fermata in m. 49. From m. 37 to m. 44, the measure-long pattern that had remained consistent throughout the opening becomes a two-measure-long contour that repeats itself four times. After the fermata and ensuing cadenza from m. 49, the opening contour returns again, but only until m. 55. After that, all arpeggios are of the two-measure variety until the closing gesture at m. 82.

While the arpeggios act as the default texture for the movement, Kinney (1962) argues that the cadenza figures act as signals that mark the endings of formal sections of

the prelude. The first cadenza is preceded by the fermata of m. 49, which draws the opening texture to a halt and signals the initiation of the leading-tone pedal. The sixteenth-note run that follows the fermata serves as an extension of the applied leading tone of C \sharp . Davis (1986) notes that

the implication of diminished harmony heralds a recitative section where harmonic tension is sustained through rhythmic and expressive freedom. A slur stretching over thirty-eight notes, the longest in all of the Violoncello Suites, indicates the expansive soloistic style of this music (134).²⁵

The cadenzas assume a structural role similar to that of the bass motive mentioned above. For the first half of the movement, the bass motive signaled the arrival of a new key area or significant harmonic event. In the second half of the piece, the cadenza texture signals the arrival of the leading-tone pedal in m. 52, the culmination of that pedal and arrival in g minor in m. 62, the arrival of the structural dominant in m. 81, and the final cadence of the movement on the tonic in m. 91. The cadenza at m. 56, which prepares g minor, is significant in that it uses chords in addition to rhapsodic sixteenth notes. These chords are the first cessation of motion in the prelude since the fermata at m. 49 and will be the only other cessation of motion until the arrival of the Neapolitan in m. 80. The chords extend the cadenza and strengthen and intensify the arrival of g minor in m. 62.

Form

Though the elements of the pattern-prelude genre are significantly altered from a harmonic perspective, they nonetheless give a broad view of the form of this piece.

²⁵ Kramer (1998) argues that this slur is likely to indicate phrasing and the free nature of this cadenza passage, rather than a single bow stroke, which would be nearly impossible to perform as written.

There is an opening gesture, followed by an episodic “improvisation” over a bassline. This is followed by two completely separate “dominant” prolongations. The first is the pedal on the dominant of the mediant, which is followed by its resolution to the mediant. The next is the highly chromaticized prolongation of the primary dominant. Also unique is the key-confirming closing gesture with a reprise of the opening. Given the strong move to g minor and the ensuing destabilizing chromaticism, the recapitulation of the opening at m. 82 seems all the more appropriate. The great deal of harmonic tension built up by the preceding music is dissipated by this closing gesture, which returns the music finally to E \flat major.

This is the final pattern prelude of the cello suites. Its form is summarized in Figure 5.8. It is fitting that it would be the most formally complex, not to mention the longest, of them all. Ironically, though, despite the complexity of its middleground voice-leading, this movement is arguably the most relentlessly consistent of all the preludes on its surface.

Figure 5.8a: Form Diagram of the prelude to the Fourth Cello Suite

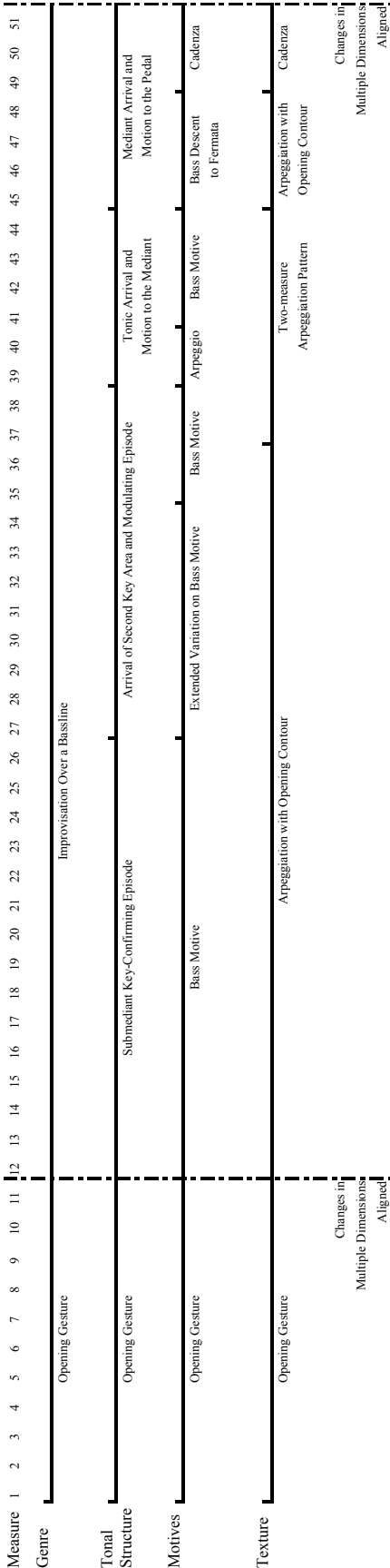


Figure 5.7b: Form Diagram of the prelude to the Fourth Cello Suite, continued

52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
Dominant Pedal (Tonicization of the Mediant)																		Dominant Prolongation												Closing Gesture									
Leading Tone (V/iii) Pedal																		Dominant Prolongation												Closing Gesture									
Arpeggios Over Pedal																		Rhapsodic Improvisation Over Pedal												Closing Gesture									
Arpeggiation with Opening Contour																		Bass Ascent from G to Bb												Closing Gesture									
Arpeggiation with Opening Contour																		Rhapsodic Improvisation												Closing Gesture									
Arpeggiation with Opening Contour																		Two-measure Arpeggiation Pattern												Closing Gesture									
Arpeggiation with Opening Contour																		Cadenza and Chords												Closing Gesture									
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CHAPTER 6

THE PRELUDE TO THE C-MINOR CELLO SUITE

Scordatura and the Score

The prelude to the Fifth Cello Suite was written for a scordatura, or retuned, cello. Bach asks that the highest string of the instrument, normally tuned to A3, be tuned a whole-step lower than normal. Chambers (1996) notes that this type of scordatura is known as the “Italian” tuning, and was in relatively regular use in the Baroque, especially in Italy.²⁶ Many modern editions are written for a normally tuned cello and simply eliminate notes from chords that would be unplayable without retuning.

The manuscript copies of the suite do not all contain this scordatura.²⁷ Four of the five manuscripts, AMB, as well as Anonymous C, D, and Copy E are written for scordatura. Unlike the other sources, the Kellner manuscript gives no indication of alternative tuning. However, Kellner does employ a variety of chords that are unplayable on a cello in standard tuning, indicating that it is most likely intended for a retuned instrument. The Bärenreiter Urtext score uses the AMB model, which is followed by Anonymous C, D, and Copy E. The score is written for scordatura with the pitches to be

²⁶ For a thorough discussion of the history of scordatura leading up to the cello suites, see Chambers (1996).

²⁷ I will refer to the various manuscripts in this chapter as follows: Anna Magdalena Bach as *AMB*, Johann Kellner as *Kellner*, the manuscript formerly known as Westphal as *Anonymous C*, Anonymous D as *Anonymous D*, and the first published edition of the score as *Copy E*.

played on the uppermost string notated one whole-step higher than concert pitch, which allows them to be more easily read by the cellist.²⁸

There are four multiple-stops, shown in Figure 6.1, that occur in the prelude that are impossible to play on a cello in standard tuning, which are adjusted in many modern editions as a result.

Figure 6.1: Chords That Rely on Scordatura.

Figure 6.1 displays four musical staves showing chords in bass clef, B-flat major, for measures m.2, m.16, m.17, and m.27, beat 1. The staves are labeled: AMB (as written), AMB (concert pitch), Kellner, and Modern Editions. The AMB (as written) staff shows chords with notes on the 4th and 5th lines (F#4, A4) and the 1st and 2nd lines (B3, D4). The AMB (concert pitch) staff shows the same chords but with the upper notes transposed down to the 3rd and 4th lines (F4, A4). The Kellner and Modern Editions staves show the same chords as the AMB (concert pitch) staff.

Note that the chord from m. 27 in AMB is playable on a cello in standard tuning in the third position. Nonetheless, it is far easier to play when one can employ an open high G string. Anna Magdalena writes this upper G as a G, rather than an A \flat , which would be consistent with the transposition of previous notes intended for the uppermost string. This could be a mistake, or could perhaps indicate that she (or Bach) expected

²⁸ I have rewritten the Bärenreiter Urtext score in concert pitch in the Appendix.

that this chord might be played in the third position. Some modern editions call for this chord in standard tuning.

The Lute Suite, BWV 995

The Appendix to this thesis contains the score to the first movement of Bach's Fifth Cello Suite, transcribed all in concert pitch and represented in the topmost staff of the score, along with two examples of the corresponding Lute Suite, BWV 995. The bottom two staves of the score (a grand staff) contain the Lute Suite in its original key of g minor. The middle grand staff is an exact transposition of the Lute Suite into c minor, to facilitate comparison of the cello and lute versions of this work. Also included are a detailed harmonic analysis of the prelude and an analysis of the fugue, outlining the various subjects and answers, as well as sequences, pedal tones, and other important structural events. It will be useful to refer to this score as various portions of the work are discussed in this chapter.

The Lute Suite is particularly important because, unlike the cello suites, it is a manuscript in Bach's hand. The manuscript can be found today in the Royal Library of Belgium in Brussels (Dube 1993). The Lute Suite does not always agree with the various scores of the Cello Suite. I will discuss disagreements between the lute and cello scores during the course of the following analysis whenever they might affect that analysis.

The French-Overture Genre

This movement's French origins are not unique within the Fifth Suite. Kramer (1998) notes that

almost every movement in the c-minor Suite is characterized by French stylistic traits; the form of the Prelude resembles that of a French overture; the Allemande is characterized by dotted rhythms; and the Courante recalls the French version of the dance, distinguished by the 3/2 meter (128).

The French Overture is built on a two-part structure with distinctly contrasting sections. The first is a slow movement, which, generally speaking, is full of dotted rhythms. In many cases, this first section, the prelude, modulates to the dominant and ends with a cadence there. The second section is a fugue, often beginning on the dominant and moving back to the tonic, although in some cases it ends on the dominant, followed by a truncated recapitulation of the initial section (Waterman, 2010). It is crucial to note that, while this first movement of Bach's Fifth Cello Suite is called a prelude, the movement as a whole is in fact an "overture," and I will refer to it as such for the duration of this chapter. I will refer to mm. 1-27 of this movement as the "prelude" and the remainder of the movement as the "fugue."

The fugue that comprises the second half of this French overture is in a different meter from the prelude, further separating the two. At m. 27, the meter changes from alla breve to 3/8 with a tempo marking of "très vite." This change from duple to triple meter, along with a change in tempo is not uncommon.²⁹ Marckx (1998) argues that "The fugal subject in this work is a dance-type as well, a *passepied*." She notes that this is similar in rhythmic feel to the minuet. She points out that Bach's "La Bretagne" is also a *passepied* and that the rhythms used in this fugue are similar to those of "La Bretagne." All of this reinforces the notion that the genre of the overture carries with it a clear formal

²⁹ Waterman (2010) has observed that "ternary or compound metre (especially 6/4) is used for the second part of slightly more than half of all French overtures."

segmentation separating the prelude from the fugue. In this regard, the opening movement of the Fifth Cello Suite is unique among all of the preludes.

Tonal Structure

The prelude contains a large-scale tonic-to-dominant harmonic motion that is typical of the first section of a French overture. This move from tonic to dominant creates a significant formal juncture within the prelude. It opens in c minor, then modulates to g minor in m. 10. The prelude also ends on G, making this first half of the overture harmonically open. Whereas the cello scores are silent on the quality of the final chord, the lute score shows that the prelude ends in m. 27 with a half-cadence in preparation for the c-minor fugue. Indeed, Dube (1993) notes that the final measure of the prelude in the lute version contains a D-major chord (equivalent to G-major when transposed). However, in the AMB there is an open fifth and octave, and in Kellner there is only an octave.

The motion from tonic to dominant harmony provides the basic bass motion over which the rest of the prelude is elaborated. From the opening chord of the prelude to the ninth measure there is a tonic pedal sounded repeatedly on the low open C string. In m. 4, the appearance of E \flat within a C7 chord tonicizes f minor. Nevertheless, the droning C pedal tone in the bass continuously asserts its presence and clearly insists that this is not an outright modulation to the subdominant. The tonic pedal is replaced in m. 10. In that measure, the bass moves to G, initiating the first key-change of the movement, setting up a new pedal, and creating a formal juncture. However, this particular trip to the dominant is brief. In m. 13 the previously stated G in the bass is reconsidered as the root of a g $^{\circ}$ chord, the ii $^{\circ}$ of f minor. The music tonicizes f minor and E \flat major in mm. 16 and 17. In

m. 18, Bach returns to the tonic chord of c minor, yet without any preceding cadential motion, leaving the previously assured tonic chord feeling ambiguous. It is in m. 19 that Bach begins to introduce an F \sharp , at last indicating the final, decisive move to g minor in m. 21.

Figure 6.2 shows the bass motion of the prelude. The figures below the staff indicate the motion of voices over the pedal tone of C \flat in mm. 1-9, the motion of voices over the pedal tone of G \flat in mm. 1-14, and the motion of voices over the bass line in mm. 15-27. The figures above the staff show motion over the upper bass line, which would be the literal bass line were the pedal tones absent from the texture. The upper bass line and upper figures clarify the harmonic motion that would have been obscured by simply reading the figures applied to the pedal tones.

Figure 6.2: Reduction of the prelude, mm. 1-26.³⁰

When viewed in this way, two essential features of the prelude emerge. First, Bach accelerates the bass motion as the movement progresses, allowing the tension to build as the prelude's final cadence approaches. Second, in mm. 10-18, while there is a G pedal present, the high level of chromaticism has a destabilizing effect on the local g-minor key, further elevating the level of tension as the prelude proceeds and driving forward toward the fugue.

Motive

Rhythm motives play a crucial role in the prelude to this overture. According to Waterman (2010), "the most conspicuous stylistic feature of the first section [of a French overture] is its combination of a slow tempo (usually marked *grave* or *lent*) with dotted

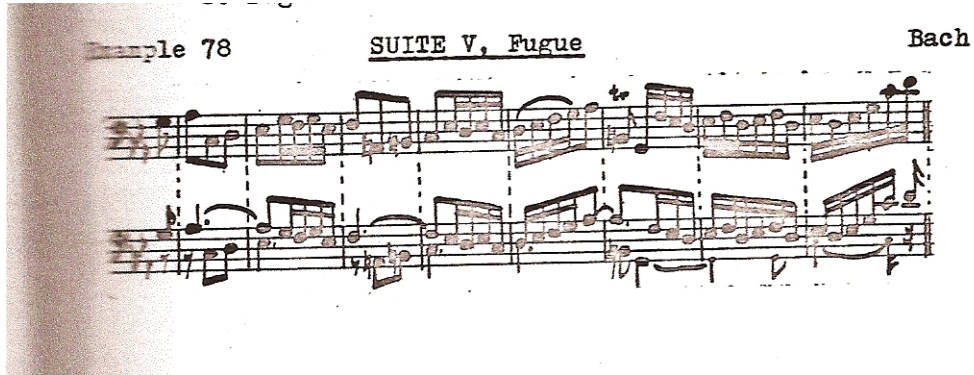
³⁰ Note that, in Figure 6.2, as well as in the harmonic analysis of this movement in the appendix, the downbeat of m. 25 contains a B \flat in the bass, analyzed as a i^6 in g-minor. It is here that the score of Bach's Lute Suite, BWV 995, can shed additional light on his harmonic thinking. The cello part in m. 25 could be interpreted to imply tonic harmony throughout, or a move to dominant harmony in the second half of the measure. The melodic figuration of this measure of the Lute Suite is identical to that of the cello part. However, Bach does add a low F in the bass staff of the lute score on beat four. Transposed down a fifth to match the c-minor cello score, this pitch would be a B \flat in the bass. This B \flat has now been sounded twice as the lowest pitch in the measure, reinforcing a hearing of this measure as a melodic elaboration of a first inversion tonic triad in the local key of g-minor.

rhythms, often called *saccadé* (meaning ‘jerked’).” This rhythm motive plays a major role in marking the prelude as separate from the fugue. Within the prelude, the motivic dimension aligns with the tonal structure significantly in m. 10. This measure is an exact transposition of m. 1. I will refer to this measure as motive A in the form diagram of the movement. The fourth beat of motive A is also closely connected to the subject of the fugue. Compare m. 1, beat 4 to m. 29, beats 2 and 3 or m. 31, beats 2 and 3.

The Fugue Subject

An examination the subject of the fugue and its various entrances clarifies the form of the fugue to a much greater extent than an examination of smaller melodic units within it. In the form diagram at the end of this chapter, the formal junctures created by appearances of the subject are labeled in the same dimensional space as the motives of the prelude since they both fall under the broad category of melodic units. Vogt (1981, 84) argues that this subject contains two lines in double counterpoint at the octave, though he does not elaborate on which pitches belong to which line or how this double counterpoint might work. Kinney (1962) similarly argues that it is made up of two voices and that, as a result, this fugue is a double fugue. Kinney’s Example 78, reproduced here as Figure 6.3, shows the two voices of the fugue subject.

Figure 6.3: Kinney's Example 78 (Kinney 1962, 350).



Winold (2007) views the subject as implying a multi-voiced texture, but not as explicitly divided into separate voices. His Example a, given here as Figure 6.4, shows his reduction of the fugue subject.

Figure 6.4: Winold's Example a (Winold 2007, 28).

a)

Gestures: a a' b

Sub-gestures: m n o n o p q r s

Scale degrees: $\hat{5}$ $\hat{6}$

First Analysis: c:i: L D T S D T S D T D T

Second Analysis: c:i: /III:S D T/L S D T S D T D T

Third Analysis: c:i: /III:SL ^(PT) T/L SL ^(PT) T S D T

Bach's orthography in portions of the Lute Suite (see Figure 6.5) would seem to indicate that he conceived of the subject in much the same way that Kinney does – as two separate voices in a dialogue.

Figure 6.5: Lute Suite, BWV 995, mm. 101-107.



A clear understanding of the subject is further hindered by the fact that it changes throughout the course of the fugue. Winold (2007) views the various entries as continual development or variation of the subject as the piece progresses. Sometimes it is developed melodically, while other instances of the subject also embellish the harmonic motion upon which it is predicated. The answer is a real answer, as opposed to a tonal one, so the transposition of the subject to the dominant is exact. As a result, it can be easily compared to the subject and evaluated for variation. Changes to the subject³¹ generally occur after the first four measures. Bach does, however, embellish the first four measures of the subject in some cases. Nonetheless, these embellishments are instances of compound line, designed to enhance the contrapuntal texture of the movement, but without obscuring the nature of the original subject. They simply serve to fill in rhythmic gaps left in the subject and, in so doing, indicate contrapuntal lines that accompany the subject.

The following figure reproduces Winold's (2007) analyses of the statements of the fugue subject.³² Any notes within the first four measures of each subject or answer that are written with additional stems are indications of instances of compound line.

³¹ For the remainder of this chapter, the word "subject" will refer to both the subject and the answer.

³² See Winold (2007), Volume 2, pp. 29 and 30.

They can be viewed as the addition of a voice that works in counterpoint with the subject.

In Figure 6.6, I have reproduced ten statements of the subject. Winold adds an eleventh statement that begins in m. 197. I view this repeated, sequenced fragment of the subject to be a stretto-like passage, rather than a statement of the subject.

Figure 6.6: Appearances of the Subject (after Winold 2007).

Statements 1 and 2 are the initial subject and answer. They are harmonically and melodically the same, with the exception of some small melodic elaboration in the

answer. Statements 3 and 4 represent a second appearance of the subject and the answer. Although identical to each other, the statements are slightly different from their respective first appearances in statements 1 and 2. However, all four opening statements imply the same harmony. Statement 5 is the fugue subject in the key of E \flat major. Again, this subject is harmonically identical to the first four subject appearances. However, it has been melodically altered in significant ways in its final measures. This particular occurrence of the subject is identical to the final appearance of the subject in c minor (No. 10).

The remaining four examples (Nos. 6-9) are all harmonically similar. However, No. 9 is melodically altered. In fact, this ninth statement is unique among all of the subjects of the fugue not only for its melodic contours, but also for the wide ambitus employed by Bach during the first four measures of the subject. Statement No. 6 is also unique in that it is the only instance of the subject that does not cadence to the tonic on the downbeat of its eighth measure. Here, Bach has used melodic materials from the previous measure (m. 94) in a sequence. The A \natural in m. 95 serves as the first note of a repetition of the melodic material from m. 94, moved up a fourth. This procedure is repeated again in m. 96. Here, Bach has created an elision between the final measures of the subject and the sequence that is to follow.

It is interesting to note that Bach opens the fugue with two statements each of the subject and answer, with only a short four-measure sequential episode between them. This may be an indication that he envisioned this piece as a four-voice fugue. On the other hand, Winold (2007) argues that there are only three voices in the fugue:

Because of the limited overall range used in this fugue it is probably best to limit the number of implied voices to three.... This exposition, however, contains four

statements, and this requires us to label that last statement as an extra statement in the exposition (29).

Winold goes on to note that there are fugues in the WTC that contain extra statements of the fugue subject within the exposition. The Lute Suite does contain chords with as many as five pitches. However, most of the lute fugue contains either one or two independently moving voices. The subject statement at m. 176 can be read as three separate voices, but each accompanimental voice moves in tandem with the subject, creating a series of chords, rather than independent lines. Regardless of the number of voices in the fugue, the exposition of this fugue contains four complete statements of the subject, aligning with other dimensions to create a formal juncture at the end of the exposition (m. 62). The final entry of the subject (m. 176) also aligns with other dimensions, signaling a juncture that initiates the closing section of the movement.

Texture

The major textural shift in this genre comes between the prelude and fugue. The prelude is fundamentally characterized by its rhapsodic and improvisatory nature. In contrast, the fugue is texturally consistent with its continuous implied-polyphonic texture and motor rhythms. The fugue is made up of a nearly-continuous sixteenth-note texture. While there is some eighth-note motion, particularly in the early statements of the subject, the overriding motion at the sixteenth-note level characterizes the fugue.

A significant departure from the consistent texture of the fugue comes in m. 171. Whereas the prelude was characterized by the very regular use of multiple-stops, the fugue contains none until this measure. The open G-string is used as the dominant pedal of the movement, thickening the texture and creating a significant formal juncture when the pedal is released at the start of the subject in m. 175.

Form

As mentioned previously, the most significant formal juncture in this movement is the division between the prelude and fugue. Within the prelude, the combination of change of pedal and reiteration of motive A creates a division at m. 10. Within the fugue, there are three sections: the exposition (mm. 27-61), the middle entries and episodes (mm. 62-175), and the final entry and coda (mm. 176-end). The last section is interesting in that it contains a stretto-like passage, a device that generally appears prior to the final entry of the fugue subject, as well as a tonic pedal, acting as V/iv.

Figure 6.7a: Form Diagram of the prelude to the Fifth Cello Suite.

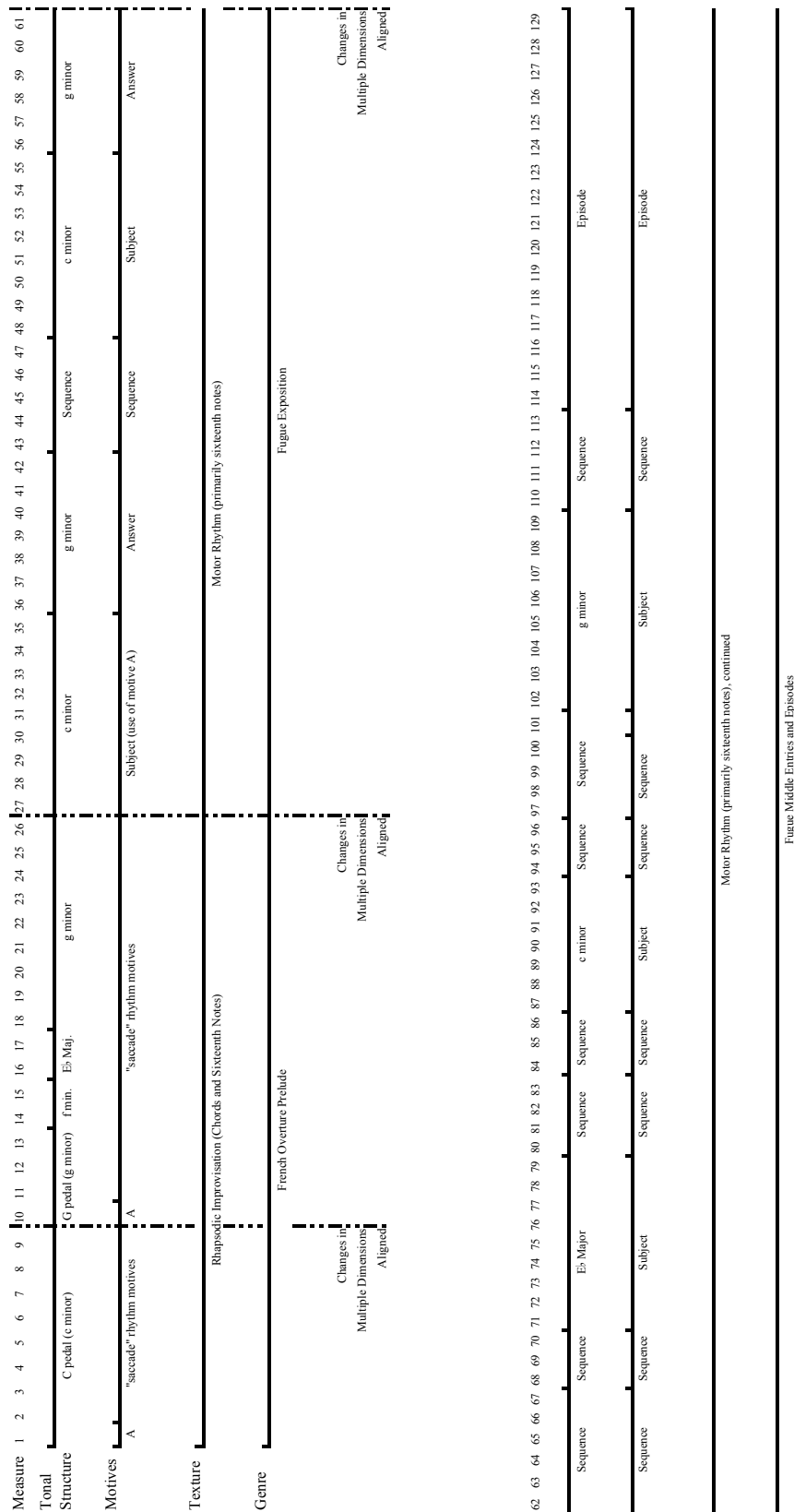
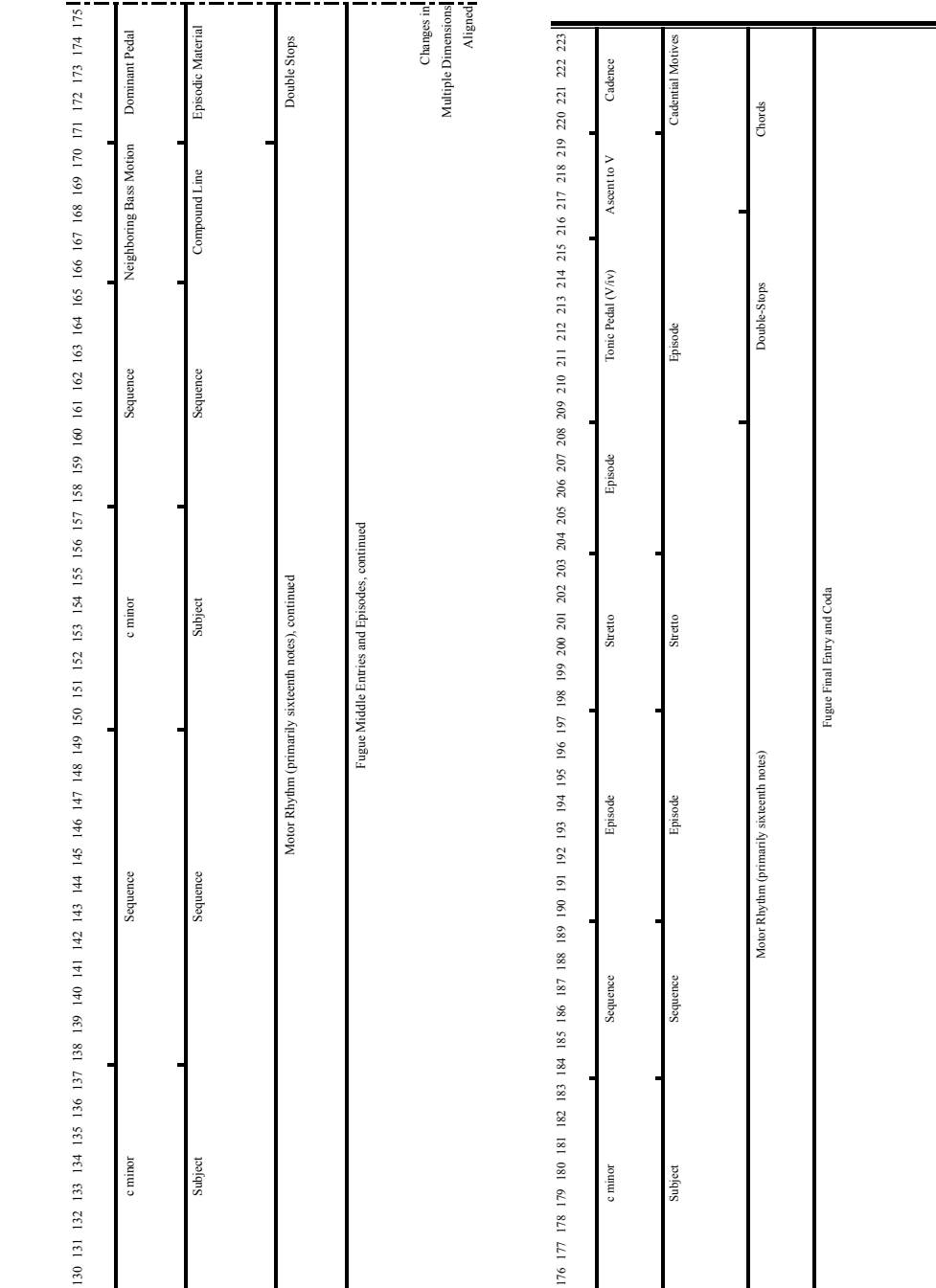


Figure 6.7b: Form Diagram of the prelude to the Fifth Cello Suite, continued.



CHAPTER 7

THE PRELUDE TO THE D-MAJOR CELLO SUITE

The Five-Stringed Violoncello

The Sixth Cello Suite calls for a cello with five strings. AMB introduces the suite as “Suitte 6.me à cinq acordes” (Bach 2000). Following this indication are the five pitches C2, G2, D3, A3, and E4, notated on the staff. Both Anonymous C and D simply read “A cinque cordes” at the beginning of the Suite (Bach 2000). Kellner, on the other hand, gives no indication of the need for the fifth string. The exact name and origin of the intended instrument is unclear, as the manuscripts do not contain any indication about the intended instrument other than the fact that it must have five strings. The suite was most likely written for one of two possible instruments: the viola pomposa or the violoncello piccolo. Kinney (1962, 332) notes that Bach never calls for viola pomposa explicitly in his works, only violoncello piccolo. He notes that there are nine cantatas dated between 1724 and 1726 that contain violoncello piccolo parts using a variety of tunings. He further observes that Bach's estate list contains a “Bassetgen,” a smaller cello that could be the violoncello piccolo that is called for in Bach's works.

Badiarov (2007) notes that there is a myth that Bach invented the viola pomposa, a stringed instrument with five strings tuned in fifths: C2, G2, D3, A3, E4. Some writers speculate that Bach was consulted on its construction, while others believe it was Bach's idea to add the fifth string. Kinney (1962, 328) attributes this myth to Johann Nikolaus Forkel, Bach's biographer, who claimed Bach as the inventor. Badiarov goes on to note that some writers have separated the viola pomposa, violoncello piccolo, and violoncello à cinq cordes into three different instrumental categories, based on their respective sizes.

There is significant disagreement in the literature that Badiarov cites regarding the exact tunings of these various instruments. Fortunately, while the exact nature of the instrument to be used for the cello suite is unclear, the tuning is made explicit in AMB. Modern performers play this suite in one of two ways, either with a standard four-string cello (employing a good deal of thumb position),³³ or with a cello that largely resembles a standard cello, but has an additional string.³⁴

Genre: Elements of the Italian Ritornello and the Pattern Prelude

Many scholars have noted that this movement resembles a ritornello. The ritornello was an important part of the new concerto style that had traveled from Italy to Cöthen. Just as the Fifth Suite was characterized as French, Kramer (1998) notes the Italian nature of the Sixth.

In the D Major Suite... Italian characteristics predominate, especially in the virtuosic Prelude, which may be compared to a concerto movement; and in the Allemande, in which figuration resembles that found in an ornamented Italian Adagio. (128)

Bach composed the Brandenburg Concertos, as well as the cello suites, while living and working in Cöthen, where he had come in contact with the concertos of Vivaldi. Lester (1999, 96) describes four basic modules in the ritornello section of the second Brandenburg Concerto. A similar analysis is appropriate for the D-major cello suite prelude. There are five modules, shown in Figure 7.1, present in the opening ritornello statement of the movement.³⁵

³³ Yo Yo Ma, Pablo Casals, and Mstislav Rostropovich all perform the sixth suite in this manner.

³⁴ Peter Wispelwey performs the sixth suite in this manner.

³⁵ These modules roughly correspond to motives identified by Winold (2007) in the first eleven measures of the piece. However, Winold refers to only the first four measures as a statement and analyzes mm. 5-11 as a “passage.”

Figure 7.1a: Reduction of Module A, mm. 1-2, arpeggiation of the tonic triad over a tonic pedal.

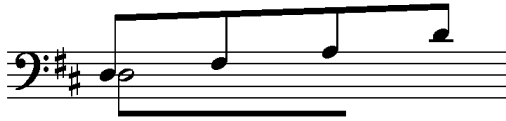


Figure 7.1b: Reduction of Module B, mm. 3-4, a pair of neighboring $\frac{6}{4}$ motions over a tonic pedal.

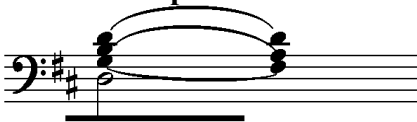


Figure 7.1c: Reduction of Module C, mm. 5-7, confirmation of tonic and modulation up to A.

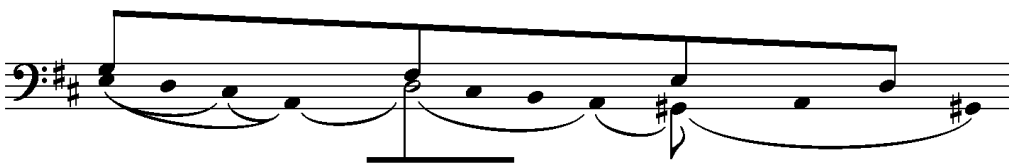


Figure 7.1d: Reduction of Module D, mm. 8-9, rising arpeggiations.

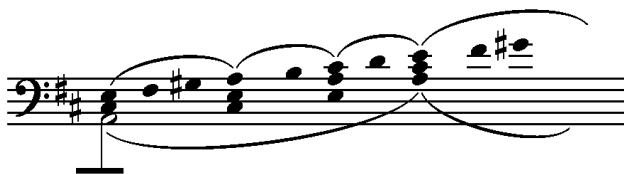


Figure 7.1e: Reduction of Module E, mm. 10-11, static arpeggiations on the local tonic.



The ritornello in a typical concerto appears at the beginning of a movement and is interspersed with episodes performed by the soloist or soloists. The cello in this movement plays the role of soloist and accompanying ensemble as this quasi-concerto movement unfolds. In the section on motive below, I will discuss the role of these modules in the episodes that appear between statements of the ritornello.

In spite of the ritornello influence on this movement, elements of the pattern prelude seen in each of the other suites are also present. The first two statements of the full 11-measure ritornello, on the tonic and dominant respectively, form an opening gesture that introduces the main harmonic and motivic materials of the piece. In fact, the first eleven measures of the piece establish the key and modulate to the dominant, which is the same process that took place at the outset of the first, third, and fourth preludes. Unlike those movements, the arrival on the dominant is not part of an ongoing episode, but rather the initiation of a repetition of the ritornello material. Bach has blended the rhetorical function of the opening gesture of the pattern prelude with the repetition that clarifies the thematic nature of the passage.

The movement contains a dominant prolongation that can be divided into two subsections: an explicit dominant pedal and a dominant prolongation that does not contain an actual pedal in the bass. Also, similar to other preludes, there is a brief return to tonic that precedes this pedal. Following the dominant prolongation, there is a restatement of the ritornello that initiates a closing gesture. After that is a coda containing the same boundary play that characterized the coda of the third prelude and the closing gesture of the fourth.

Tonal Structure

The prelude opens with an eleven-measure ritornello that modulates to the dominant. Modulation up by fifth becomes a norm for the first portion of the movement as the music continues from the dominant through the key of the supertonic (m. 22) and the submediant (m. 33). The piece then consists of a variety of elaborations and chromaticizations of b minor for quite some time before finally breaking the cycle of upward modulations by fifth to modulate to the subdominant (m. 52). In G major, Bach repeats the ritornello, which has been absent for some time. This ritornello leads briefly to the tonic (m. 64) and then to the dominant pedal (m. 68), which clarifies the subdominant retroactively as a structural neighbor to the dominant. The brief tonicization of the tonic prior to the dominant pedal recalls the pattern prelude movements that all featured a return to tonic prior to the dominant pedal.

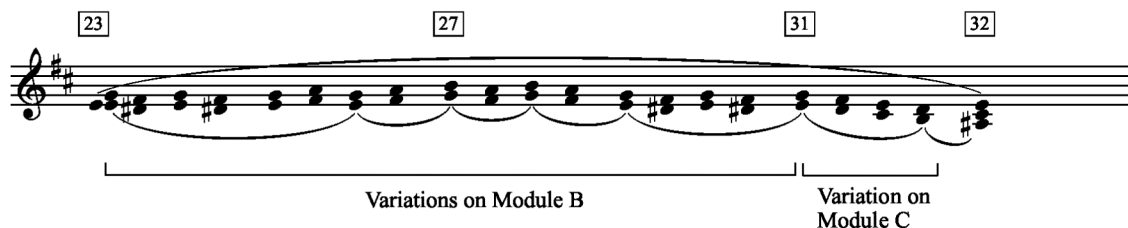
The dominant is prolonged from m. 68 to m. 85. This prolongation gives way to a brief digression to the subdominant before returning to the dominant and a statement of the first two measures of the ritornello in m. 90. This particular statement is unique not only for its brevity, but for its harmony. For the first time in the movement, the ritornello is presented in a key that is not firmly established, and as a result it is repeated two measures later in the tonic. The closing measures of the piece feature a chromaticized approach to the dominant followed by a tonic pedal. Figure 7.2 is a bass reduction of the movement.

[illegible]

Motive

The opening ritornello in mm. 1-11 presents the five modules mentioned above. It is copied almost exactly in A major in mm. 12-22. In m. 23 material that is loosely similar to module A arrives and could be considered as a return of the ritornello in e minor.³⁶ From a textural perspective, this section's use of *ondulé* recalls module A. However, that texture remains until halfway through m. 32 without ever moving to the other modules. Further, while this section resembles module A on the surface, it more closely resembles the motion in parallel thirds that characterizes module B at the middleground level. Figure 7.3 shows the middleground melody in mm. 23-32.

Figure 7.3: Variations on Modules B and C, mm. 23-32.



Additionally, the descending line in m. 31 that passes from the local tonic of e minor down to the leading tone of b minor in m. 32 resembles module C.

It is possible that an intended e-minor ritornello was modified in consideration of the range of the instrument. The first three modules require pitches one octave above the open string that begins the ritornello. The next two modules require notes that extend a perfect 12th above the starting pitch. This would require the player to perform a B5 on

³⁶ Various authors have called this a ritornello statement in the supertonic. See for example Kutz (2002, 74), Kramer (1998, 135), Winold (2007, 32).

the high E string. Bach does call for a G5 during the dominant pedal, but never anything higher, which would seem to rule out the use of modules D and E in the key of the supertonic. However, module E of the previous ritornello is extended to E5, which would seem to indicate the possibility that modules A through C are possible in the supertonic key. In module A, Bach notates one eighth-note within each group of three with a stem in opposing direction.³⁷ This indicates that the cellist should play one of the pitches as an open string and the other as a fingered note on the next lowest string.³⁸ As a result, the ascending arpeggios of module A could have been too difficult to play while exploiting the resonance of the thin open E string and thus caused Bach to modify that module. This hypothesis is speculative at best, but we can conclude that while the harmonic plan of modulation by ascending fifth continues through this section and the next, motivic consistency via the ritornello modules is abandoned until the modulation to G major. As a result, module A (the signal of the ritornello) is presented only in D major or its two most closely related major keys: G major and A major. The e-minor passage from m. 23-32 is an episode featuring a sequence of parallel thirds. This is an essential distinction since it clarifies the fact that this section serves as a signal of the end of the opening material of the movement and the beginning of episodic material.

Motivic sequences that appear later in this movement often consist of a model and a repetition that are of significant length. The exception to this observation is during the dominant prolongation, which provides a number of sequential procedures that are on average a half-measure in length. Notably long sequences include mm. 46-47, a two-measure motivic model that is copied and repeated at m. 48. More notable is the four-

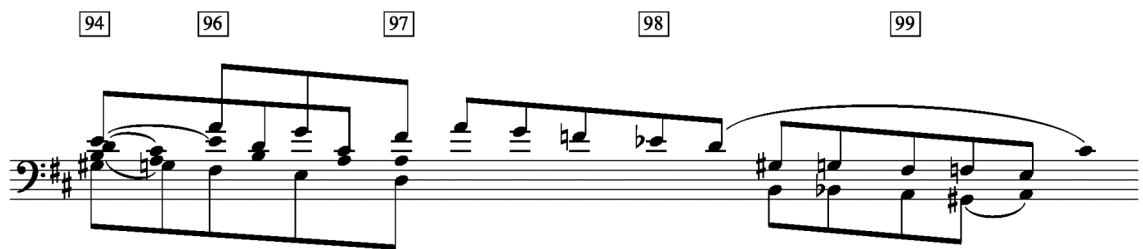
³⁷ This notation procedure is consistent in all of the manuscripts.

³⁸ This is good example of the bariolage technique.

measure motivic model that is established from m. 60 to m. 63. This model is repeated in mm. 64-67, and then the first two measures are repeated in mm. 68-69 in preparation for the dominant pedal. This preparation of the dominant with an abnormally long sequence allows Bach to begin to slowly increase the acceleration of the rate of sequence even before the pedal has begun. By the time the pedal arrives, the sequence length has already been truncated and the further acceleration of the pedal point is assured. The dominant prolongation itself is characterized by an elaborated series of parallel sixths (see Figure 7.1, mm. 70-84).

Module A appears in m. 90, and again in m. 92 in D major, but without sounding convincingly tonic. Here, the misalignment of dimensions is particularly pronounced. The ritornello statements would seem to indicate a reprise of the opening from a motivic perspective, but harmonically the movement is not yet firmly on the tonic. This is an unprepared recapitulatory gesture. Dimensions align again in mm. 94-99, which contain a series of descending scalar motivic gestures (recalling module C) that lead finally to a convincing cadence in D major (see Figure 7.4). This section constitutes the closing cadential gesture of the movement.

Figure 7.4: Descending Scalar Motives, mm. 94 – 99.



Texture

The rhythmic continuity of this movement is remarkable. It is the only prelude whose motor rhythm is maintained nearly from beginning to end. There are no fermatas, extended rests, or changes in meter. Changes in the rate of rhythmic forward motion do not appear until the sixteenth and thirty-second notes of m. 78, and the only reduction in the rate of forward motion occurs with the appearance of chords in m. 98. In that measure, the increase in dissonance heightens the harmonic intensity of the passage, thus propelling it forward in a different way. Unlike that ending section, most of the piece is characterized by consistent motion in eighth-notes. Most measures contain arpeggios or some form of compound line. However, the *ondulé* texture, used rather freely in other preludes is here reserved only for module A of the ritornello or the episodic material in e minor at m. 23. This textural device is consistently aligned with both the tonal structure and the motivic domain in order to accentuate the return of the ritornello module A and mark its formal importance.

The appearance of faster subdivisions in m. 78 occurs during the dominant prolongation and is out of alignment with the tonal structure. Nonetheless, once this increase in motion has taken place, the accelerated texture continues for the remainder of the dominant and does not return to eighth-note motion until the return of the ritornello. Thus the increase in speed is used as a means to increase the intensity of the pedal, which has already maximized its potential harmonic tension. Kramer (1998) argues that this section constitutes a cadenza, which would support an analysis of this movement as being composed in the concerto style. The only other departure from the general use of arpeggiated textures is the section in b minor (mm. 33-45), which uses arpeggios, but also

contains a variety of scales and other diminutional patterns. This shift in texture aligns with the tonal structure and marks it as the first true episode of this quasi-concerto. A similar level of textural saturation returns from m. 94 to m. 99 during the closing gesture of the piece, where Bach makes use of accelerated note-values, arpeggio, compound line, and chords – all within a six-measure phrase.

Form

Winold (2007) describes the form as being divided into two parts with the return of the ritornello at m. 54 marking the start of the second half of the piece. If the prelude is viewed as a ritornello movement, this formal juncture is the most significant juncture in the middle of the movement. If the movement is viewed as a pattern prelude, a dividing line can be drawn near the beginning of the dominant pedal in m. 70. Both of these formal junctures, as well as the beginning of the closing gesture in m. 90, are characterized by an alignment of all dimensions except for tonal structure. At m. 52 there is a cadence in G, but all other dimensions align with the beginning of module A at m. 54. Similarly, the dominant pedal begins in m. 68, but it occurs in the midst of a sequence. Other dimensions align at m. 70. The closing gesture begins with the appearance of module A in m. 90. This appearance of module A is in A major, making it a part of the dominant prolongation tonally. D major arrives two measures later. The movement cadences strongly in m. 100 and all dimensions finally align at the beginning of the Coda.

CHAPTER 8

CONCLUSION

Comparative Analysis of the Pattern Preludes

There are striking similarities among the four preludes that can be characterized as pattern preludes (G major, d minor, C major, and E \flat major). Figure 8.1 is a chart that shows how each of these preludes fits within the broad formal outline of the pattern prelude. Each one begins with a key-establishing opening gesture. The C-major prelude has a unique opening gesture in that a significant portion of the musical material is repeated at the octave. The opening of each prelude is followed by a sequence that modulates to a secondary key. In the preludes to the first three suites, this initial modulation is to what I would call the expected secondary key. This expected secondary key is the dominant in a major-mode movement, as was the case in the G- and C-major preludes, and the mediant in a minor-mode movement, as was the case in the d-minor prelude. In the E \flat -major prelude, Bach modulates instead to c minor. This prelude is also unique in that c minor is heard as a harmony at the outset of the modulating sequence, rather than being a final arrival point after a direct departure from the tonic.

Following the arrival in a secondary key, there is an episode of variable scope that generally travels through other key areas. In each of the first three pattern preludes, there is then a return to tonic prior to a motion to the dominant. In the E \flat prelude, there is a return to tonic prior to a motion to the mediant. The mediant then acts as local tonic, which precedes a motion to its own dominant. Each prelude contains a subdivided “dominant prolongation” section. The G-major prelude contains an elaborated dominant

prolongation, which is followed by an explicit dominant pedal. Additionally, the dominant is prolonged until the final cadence of the movement, which is also the case in the d-minor prelude. The C-major prelude departs from this model by placing a dominant pedal before the more active dominant prolongation. The textures are also reversed. The first prelude features elaborate textures followed by *ondulé* and a strong dominant pedal; the third begins with *ondulé* and moves to more elaborate textures. The E \flat -major prelude elaborates on the notion of the dominant prolongation even further, beginning with a pedal on the dominant of the mediant. This is followed by a prolongation of the primary dominant, creating two completely separate sections.

In the first prelude, the closing gesture is preceded by an ascent. In mm. 37-38 the listener hears a rising chromatic line over a dominant pedal. In the C-major and d-minor preludes, a sequential ascent initiates the closing section. The rising sequential material of mm. 55-58 of the d-minor prelude is similar in function to the material in mm. 71-75 of the C-major prelude. However, in the third prelude, rather than arriving on a strong dominant pedal (as does the d-minor), the bass proceeds back downward toward the cadence at m. 82.

The closing gestures of the first two preludes are quite similar harmonically. The voicings of the chords in the final four measures of the G-major prelude are nearly identical to that of the d-minor prelude from m. 60 to the end, resulting in a figuring over the dominant of $\frac{5}{3} \frac{6}{4} \frac{5}{4} \frac{7}{4} \frac{7}{3}$ in the G-major and a figuring of $\frac{7}{3} \frac{6}{4} \frac{5}{4} \frac{5}{3}$ in the d-minor. Additionally, each of these preludes prolongs the dominant until the final measure, cadencing only at the last possible moment. The arpeggiated texture at the end of the d-minor prelude suggested by Anonymous D and Copy E is very similar to that of the

close of the G-major prelude, resulting from the activation of the progressions using the *ondulé* technique that is idiomatic to the cello.

In the third prelude there is a coda that features a tonic prolongation. The fourth prelude also contains a unique ending in that it features a reprise of the opening gesture as its closing. The closings of both the third and fourth preludes (and thus the opening of the fourth prelude, as well) contain an example of boundary play. This boundary play appears in the closing of the sixth prelude, as well. That movement is unique in its scope and in its association with the ritornello genre, but it nonetheless contains strong elements of the pattern prelude genre.

Figure 8.1: Comparison of the Pattern Preludes (Preludes in G, d, C, and Eb).

	Opening Gesture		Prelude Bass		Dominant			Closing Geture		Coda
			Sequence	Secondary Key Arrival	episode	Tonic Arrival; Motion to V	Part 1	Part 2		
Prelude in G	mm. 1-4		mm. 5-6	mm. 7-10	mm. 11-18	m. 19-22	mm. 22-30 (prolongation)	mm. 31-38 (pedal)	mm. 39-42	
Prelude in d	mm. 1-4		mm. 5-12	m. 13	mm. 14-35	mm. 36-39	mm. 40-48	mm. 49-54	mm. 55-63	
Prelude in C	mm. 1-6		mm. 7-12	m. 13-14	m. 15-36	m. 37-44	mm. 45-60 (pedal)	mm. 61-70 (prolongation)	m. 71-82	mm. 82-88
Prelude in Eb	mm. 1-10		mm. 11-26	mm. 27-28	mm. 29-38	mm. 39-51	mm. 52-69 (mediant tonicization)	mm. 70-81 (dominant prolongation)	mm. 81-91	

Conclusion

Sensitivity to the interplay of musical dimensions helps us understand musical form. This is especially true when analyzing movements like the Baroque prelude, where one cannot make any pre-analytical formal assumptions. In approaching a musical work without a pre-defined form, it is beneficial to examine the salient dimensions of the work and evaluate the formal junctures that are suggested by the interplay of those dimensions. However, even in genres that are frequently associated with pre-determined formal structures, analysis of a composer's manipulation of musical dimensions can lead to a richer understanding of the compositional fabric. More important, because the dimensions themselves are not pre-determined, the analyst is free to examine whatever elements are most salient in any particular work. I examine only four possible dimensions here, but, as Smith (1994) has acknowledged, many others are certainly possible.

This analytical approach sheds light on the respective forms of the preludes to the Six Suites for Unaccompanied Violoncello. More importantly, it shows a great deal of similarity among the preludes and in the way that Bach uses the various dimensions to weave his musical fabric. The similarity among the pattern preludes in turn shows that Bach sometimes used a formal structure that was specific to prelude movements. Further, because of the didactic nature of this set of suites (and of similar collections like the WTC or the Violin Sonatas and Partitas), one can view the opening prelude as the most straightforward manifestation of that formal structure, whereas each of the following preludes constitutes a further elaboration on that structure. Even the sixth

prelude can be viewed in this light, as a highly elaborate pattern prelude. This also highlights the uniqueness of the fifth suite's prelude, as well as the French character of that suite in general.

This analytical method suggests a great deal of future research and analysis. One such avenue might be the expansion of the number and type of musical dimensions or the exploration of what can qualify as a musical dimension that is appropriate for analysis. Even within the field of motivic analysis, one could examine the interaction of motives at various levels of structure and look at the ways that such interactions play out over the course of a piece. Another fruitful endeavor might be the examination of various dimensions as they interact with previously researched repertoire. Within the cello suites themselves, one might examine the interaction of the various musical dimensions with the various dance movements, each of which has a pre-defined form that might interact with each dimension in any number of ways. Other Baroque genres would benefit from this view as well, particularly the toccata and fantasia, which, like preludes, are improvisatory in origin and do not have pre-defined forms. In the music of later eras, one might compare motivic notions of sonata form to harmonic notions of sonata form and look at the different ways that sonata form can be analyzed based on these seemingly opposite points of view.

This analytical method is particularly appropriate to a quasi-improvisational Baroque genre such as the prelude. Because such movements lack clear formal delineations and even clear phrasing in many cases, examining multiple elements is helpful in understanding their construction. By using a diverse set of tools, this method allows us to more deeply understand Bach's diverse musical language.

APPENDIX

PRELUDE TO SUITE NO. 5 FOR UNACCOMPANIED VIOLONCELLO, BWV 1011 AND PRELUDE TO LUTE SUITE BWV 995

Prelude to Suite V
BWV 1011
(cello score)

Prelude to Lute Suite
BWV 995
(transposed to c minor)

Prelude to Lute Suite
BWV 995
(original key)

6

10

14

Chord symbols: $vii^{\circ 7}$, i , $Eb: ii$, V_3 , I , vi , $g: iv$

19

Chord symbols: V^6 , i^6 , V_3 , V^7 , i , iv^7

23

Chord symbols: $vii^{\circ 7}$, V^7 , i^6

26 subject

i iv $V_4^6 - \frac{5}{3}$ I

35 answer

sequence:
down a 5th

44 subject

53

answer

61

sequence:
down a 5th

sequence:
down a 3rd

69

subject

78

sequence:
up a 5th

sequence:
down a 2nd

87

sequence:
down a 5th

subject

95

sequence:
down a 5th

subject

104

sequence:
down a 5th

Musical score for measures 104-112. The score is written for three staves: Bass, Treble, and Bass. The key signature is B-flat major (two flats). The time signature is 4/4. The music features a complex sequence of eighth and sixteenth notes, with a descending fifth interval indicated by a bracket and the text 'sequence: down a 5th'.

113

Musical score for measures 113-120. The score is written for three staves: Bass, Treble, and Bass. The key signature is B-flat major (two flats). The time signature is 4/4. The music continues the sequence from the previous system, featuring a descending fifth interval indicated by a bracket and the text 'sequence: down a 5th'.

121

Musical score for measures 121-128. The score is written for three staves: Bass, Treble, and Bass. The key signature is B-flat major (two flats). The time signature is 4/4. The music continues the sequence from the previous system, featuring a descending fifth interval indicated by a bracket and the text 'sequence: down a 5th'.

129 subject

137 sequence:
down a 2nd

146 subject

155

sequence:
down a 5th

163

compound line (preparation for the pedal):

170

dominant pedal

subject

179

sequence:
up a 5th

9

187

195

sequence:
down a 3rd

204

tonic pedal (interpreted as V of iv)

Three staves of music in B-flat major. The top staff features a continuous eighth-note bass line. The middle and bottom staves have a more complex texture with various rests and eighth-note patterns. A bracket above the top staff from measure 204 to 211 is labeled 'tonic pedal (interpreted as V of iv)'.

212

Three staves of music in B-flat major. The top staff continues the eighth-note bass line. The middle and bottom staves show a variety of rhythmic patterns, including eighth and sixteenth notes, and rests.

218

Three staves of music in B-flat major. The top staff features a more active melody with eighth and sixteenth notes. The middle and bottom staves provide harmonic support with various rests and rhythmic patterns. The piece concludes with a final chord in the bottom staff.

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